

Immigrants' Labour Market Positions in Europe and the Effect of the Education System

**Andreas Herwig
EU-Microdata User Conference
02 March 2017**

Theoretical Model and Research Questions

Macro- / Country level

Education System (*Stratification, Vocational specificity*)

In how far can country-differences be explained by differences in host countries' education systems?

To what extent do labour market positions in Europe differ, according to people's origin and their education's origin?

Micro- / Individual level

Immigration status

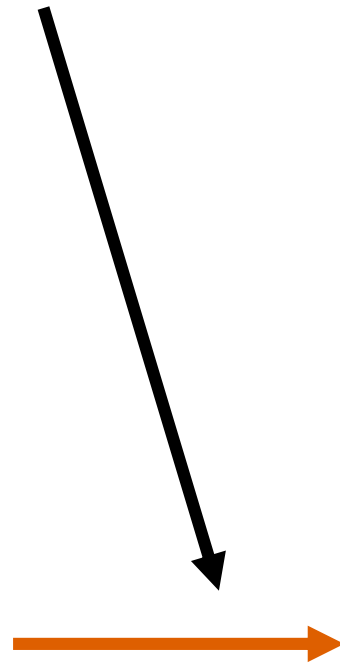
Natives (*non-immigrants*)

Immigrants with domestic certificates

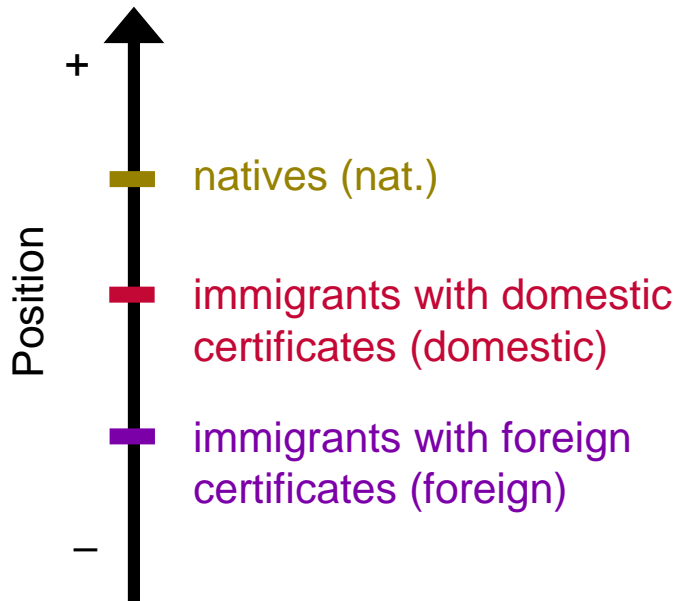
Immigrants with foreign certificates only

Employment position

(*high / intermediate vs. low*)



Ethnic Inequality: Individual Factors (Micro)



Immigrants (with domestic and especially with foreign certificates)

- Less (host country specific) human capital
- Less social capital
- Higher job search costs
- Discrimination

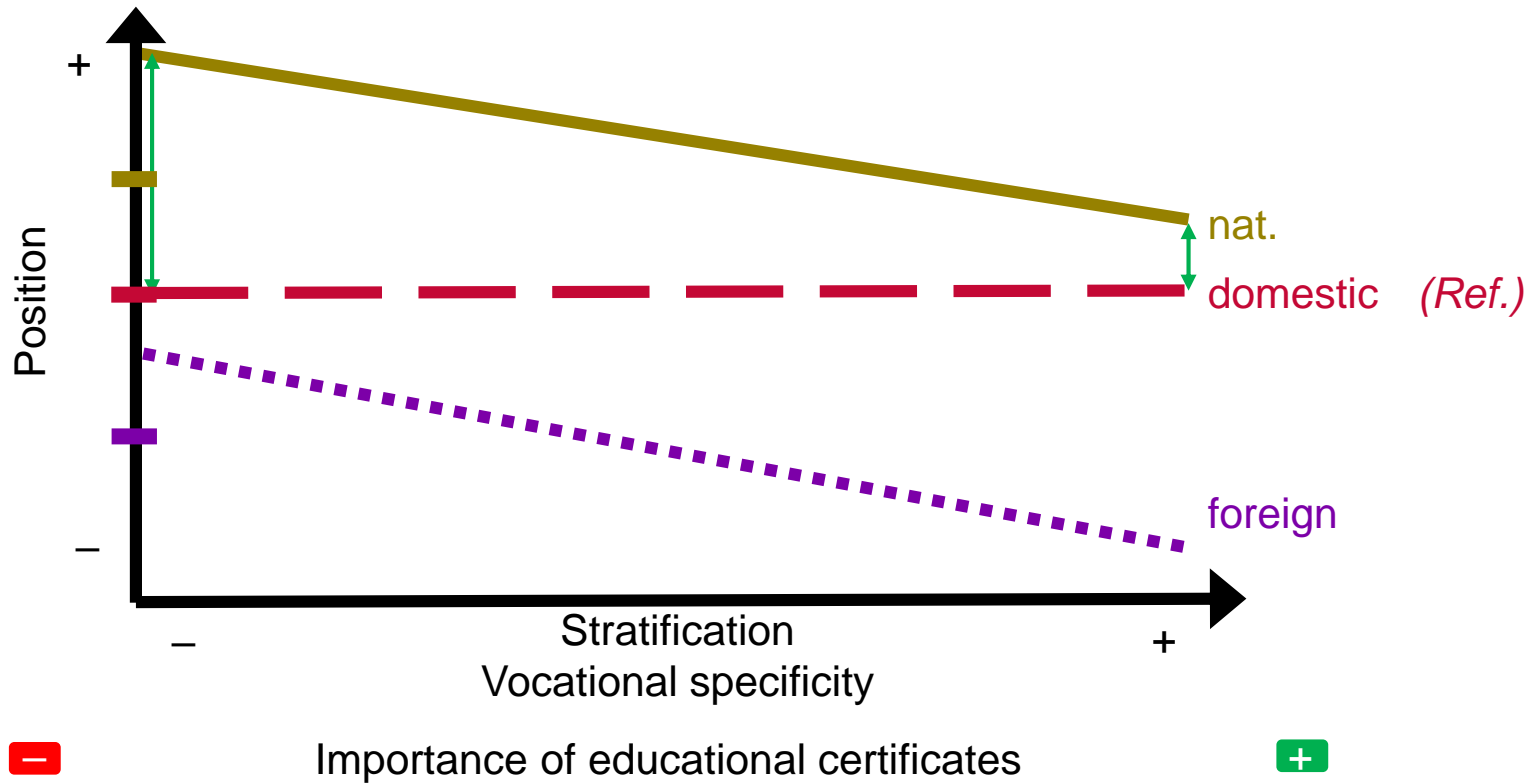
Immigrants with foreign certificates

- Lower signalling power of educational certificates

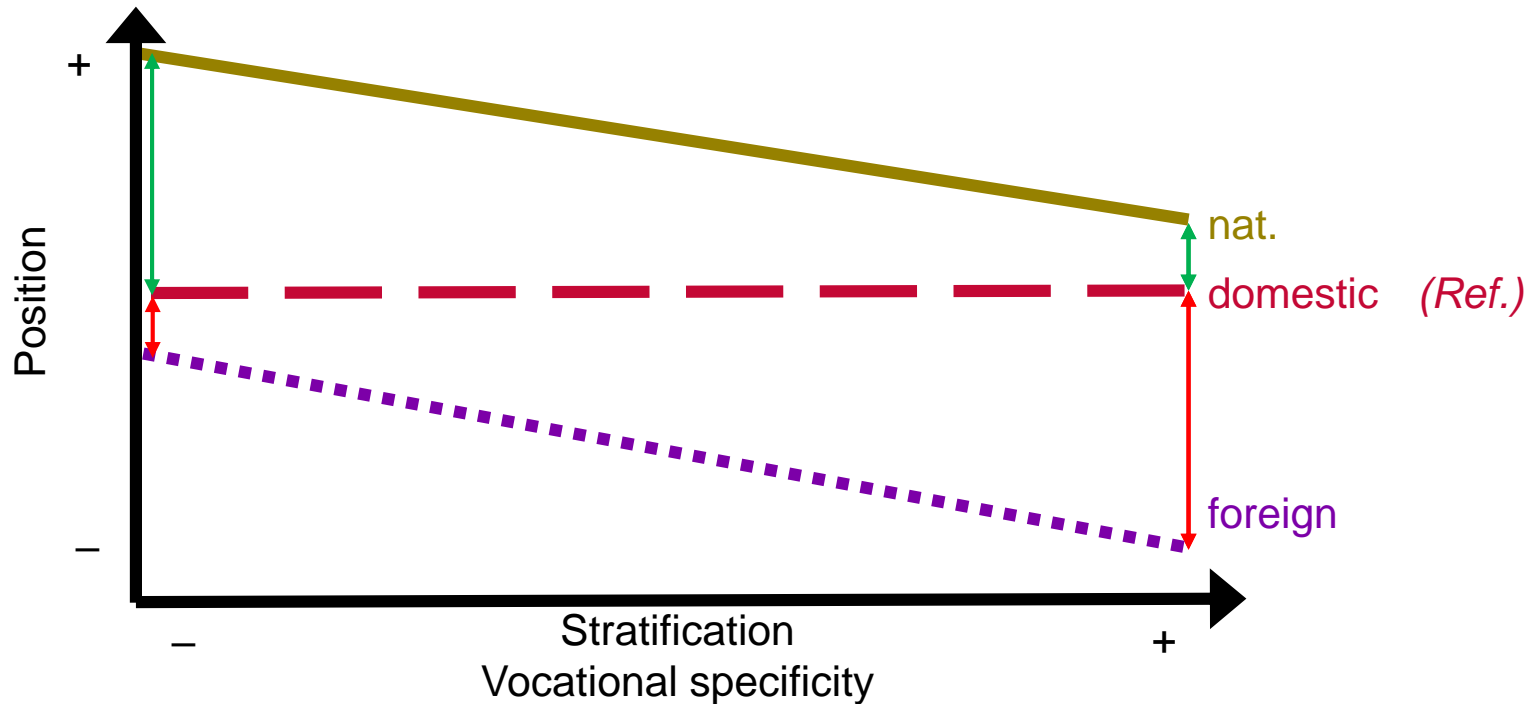
Micro hypothesis (H1):

It can be assumed that natives have higher employment positions than immigrants with domestic educational certificates – even with a comparable level of education – and immigrants with foreign certificates lower positions.

Ethnic Inequality: Education System (Macro)



Ethnic Inequality: Education System (Macro)



+

Importance of more subjective hiring criteria

-

➤ nat.: smaller **advantage** vs. **domestic** by stratif. / voc. specif.

➤ **negative influence**

-

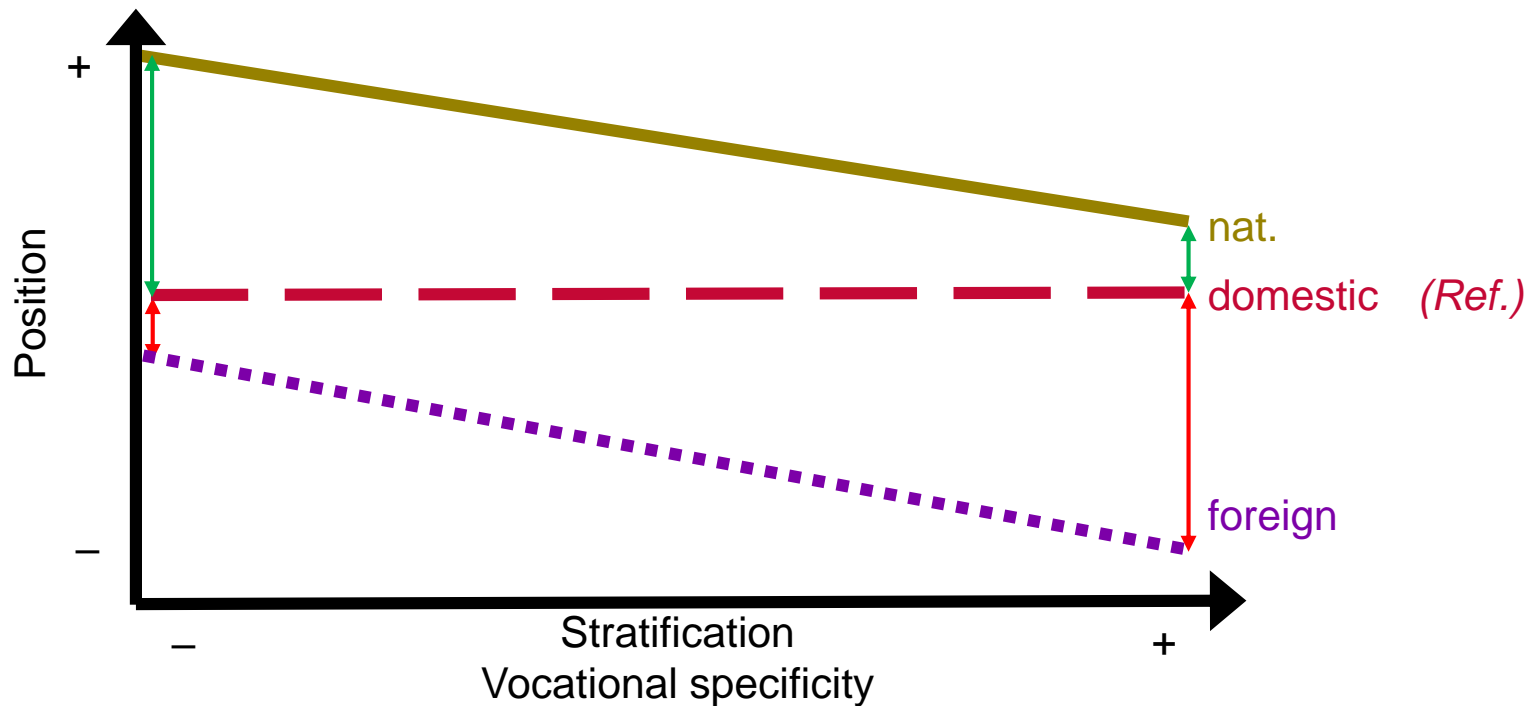
Devaluation of foreign educational certificates

+

➤ foreign: bigger **disadvantage** vs. **domestic** by stratif. / voc. specif.

➤ **negative influence**

Ethnic Inequality: Education System (Macro)



Macro hypothesis (H2):

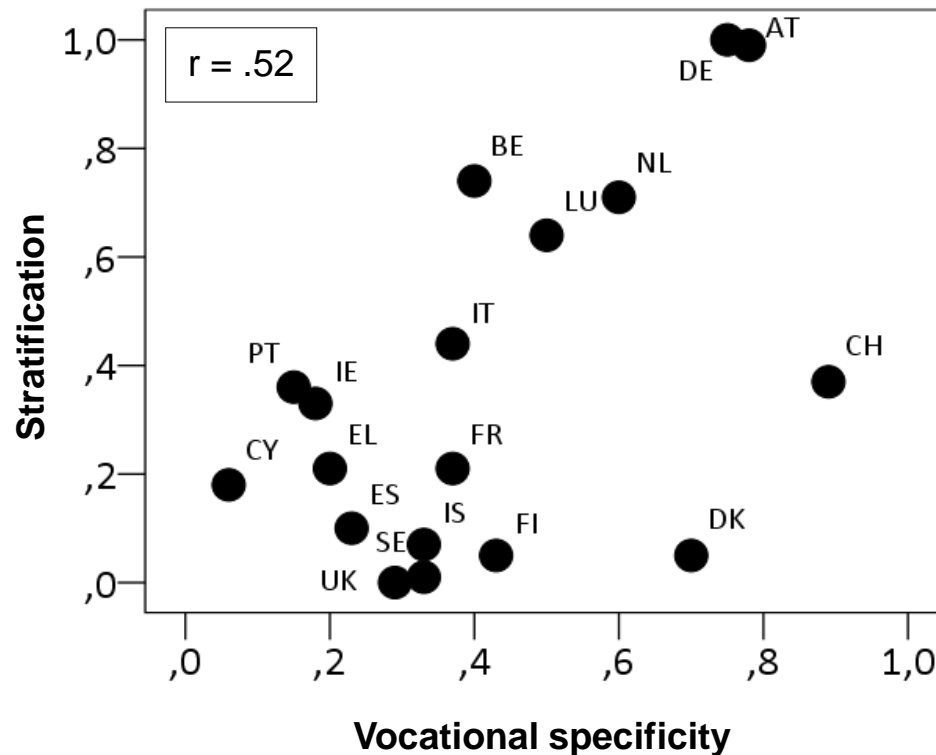
It can be expected that stratification and vocational specificity have a negative influence on employment positions of natives and immigrants with foreign educational certificates only, relative to immigrants with domestic certificates.

Data and Operationalisation (Micro)

- Data: European Union Labour Force Survey (EU-LFS) 2009-2013
(pooled; DE: Microcensus SUF 2011)
- Sample: 25- to 39-year olds in employment
(excl. students etc.)
in 18 western European countries
(AT, BE, CH, CY, DE, DK, EL, ES, FI,
FR, IE, IS, IT, LU, NL, PT, SE, UK)
- DV: Position: high / intermediate (ESeC 1-8) vs. low (ESeC 9)
- Controls:

Level of education	(low, medium, high)
Age	(25-29, 30-34, 35-39)
Origin	(third country, EU- / EFTA)
Duration of residence	(1-9, 10+)
Sex	(female, male)
Reference year	(2009, 2010, 2011, 2012, 2013)

Operationalisation (Macro): Education System



Note:

Indexes base on indexes in Bol/van de Werfhorst 2013: 294.

Stratification is based on “Index of tracking“:

- (1) Age of first selection,
- (2) Percentage of total curriculum that is tracked
- (3) Number of trackt available for 15-year-olds.

Estimated: CY.

Vocational specificity is a combination of “Index of vocational enrollment“ (*percentage of students enrolled in upper sec. voc. programs*) and “Vocational specificity (dual system)“ (*percentage of upper sec. voc. education that takes place in dual system*).

Estimated: CY, PT.

Operationalisation (Macro): Further Context Factors

Labour Market

- Unemployment rate
- Change in unemployment rate (to previous year)
- GDP
- Change in GDP (to 2006)
- Size of lowest labour market segment (ESeC 9)

Welfare State

- Flexicurity (dichotomous)
- Employment Protection Legislation for regular contracts (EPL regular)
- Employment Protection Legislation for temporary contracts (EPL temporary)

Integration Policy

- Migrant Integration Policy Index (MIPEX)

Cultural Closeness resp. Distance

- Share of population coming from countries with predominantly muslim population
- Share of population coming from third countries
- Share of immigrants coming from countries with frontier to host country
- Share of immigrants coming from countries with same official language

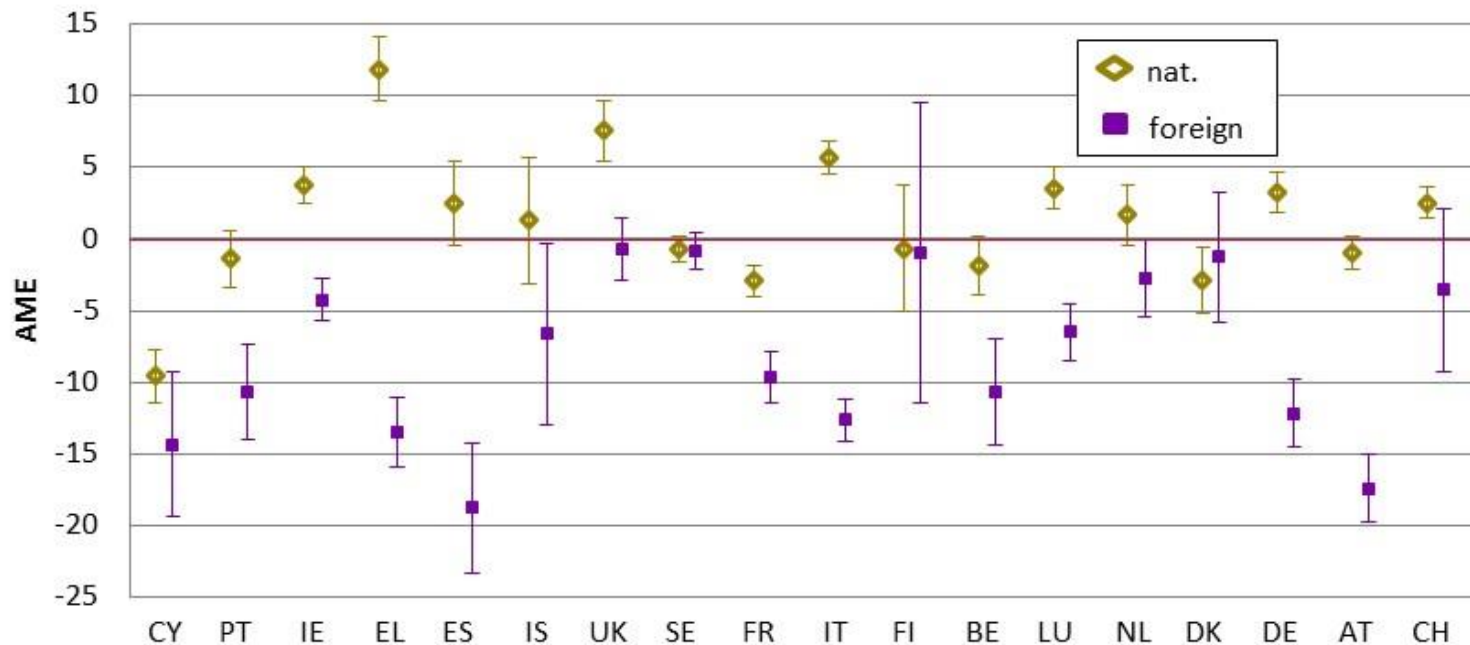
Methods

1. Two-step Multilevel Analysis
 - Step 1 (**Micro**): ethnic inequality on Europe's labour markets
 - binary logistic regression for each country separately
 - DV: employment position
 - Step 2 (**Macro**): education system and ethnic inequality
 - Plots

2. One-step Multilevel Analysis (**Micro** and **Macro**)
 - Binary logistic regression
 - Combination of individual and context factors
 - DV: employment position

Two-step Multi Level Analysis: Step 1

Position of natives and immigrants with foreign certificates only
(Ref.: *immigrants with domestic certificates; in employment; AME*)

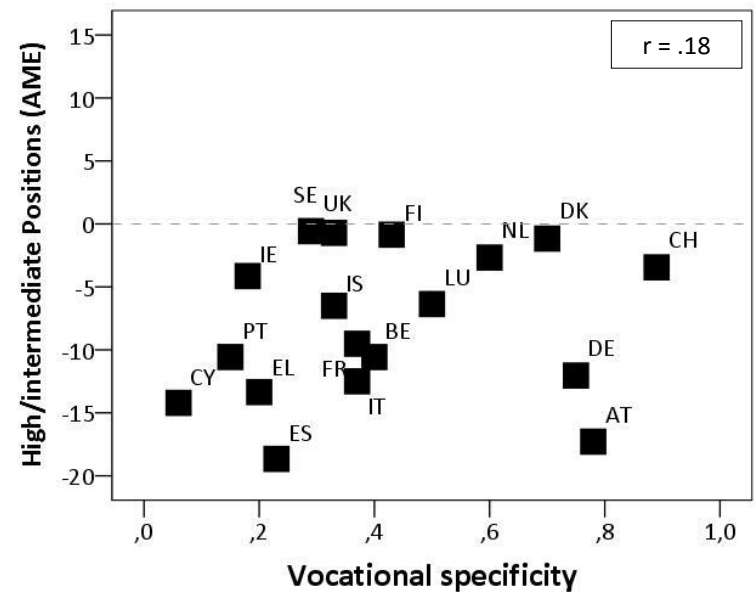
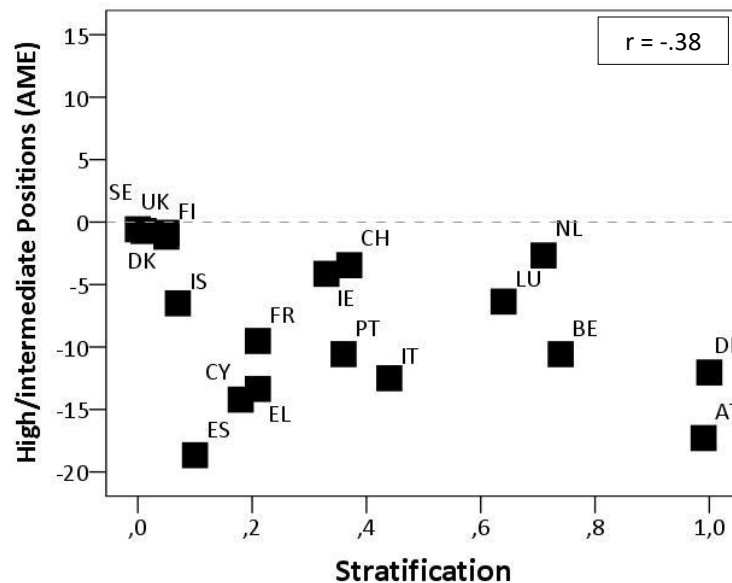


Note: Incl. confidence intervals 95 %. Logistic regression for each country separately. Controls: level of education, age, origin, duration of residence, sex, reference year, immigration status*level of education.

nat. \geq domestic $>$ foreign

Two-step Multi Level Analysis: Step 2

Position of immigrants with foreign certificates only by stratification / vocational specificity and host country (Ref.: domestic; AME)



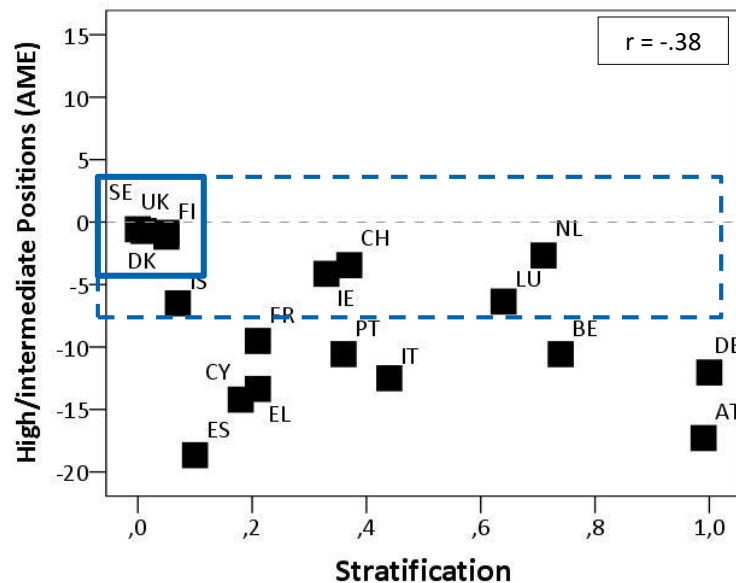
Anm.: Logistic regression for each country separately; controls: level of education, age, origin, duration of residence, sex, reference year, immigration status*level of education.

Position of immigrants with foreign certificates only	H2	Results	
		2-step (Plots)	1-step
Stratification	-	(-)	
Vocational specificity	-	(+)	

Note:
 Influence of stratif. / voc. specif.:
 ,+' = positive;
 ,(+) = rather positive;
 ,-' = negative;
 ,(-) = rather negative.

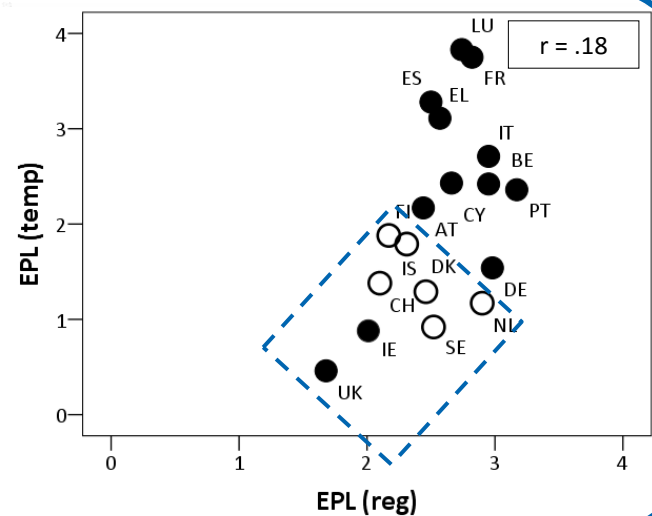
Two-step Multi Level Analysis: Step 2

Position of immigrants with foreign certificates only by stratification / vocational specificity and host country (Ref.: domestic; AME)



Source:
OECD 2014;
own
calculations.

Note:
unfilled
circle
= flexicure,
filled
circle
= inflexicure.



Anm.: Logistic regression for each country separately; controls: level of education, age, origin, duration of residence, sex, reference year, immigration status*level of education.

Position of immigrants with foreign certificates only	H2	Results	
		2-step (Plots)	1-step
Stratification	-	(-)	
Vocational specificity	-	(+)	

Note:

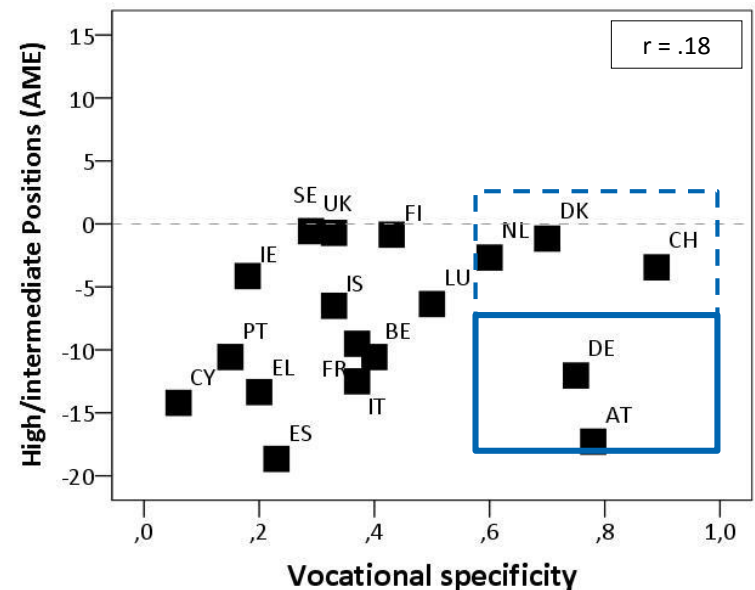
Influence of stratif. / voc. specif.:
,+ = positive;
,(+)' = rather positive;
,- = negative;
,(-)' = rather negative.

Two-step Multi Level Analysis: Step 2

Position of immigrants with foreign certificates only by stratification / vocational specificity and host country (*Ref.: domestic; AME*)

	CH	DK	NL	AT	DE
Stratification	moderate	low	moderate	high	
Flexicurity	flexicure			inflexicure	
Concept of the nation	ethnic	–	multi-culturalistic	ethnic	
Cultural closeness	strong	weak		moderate	
Integration policies	unfavourable	favourable		unfavourable	–

Stratification



Anm.: Logistic regression for each country separately; controls: level of education, age, origin, duration of residence, sex, reference year, immigration status*level of education.

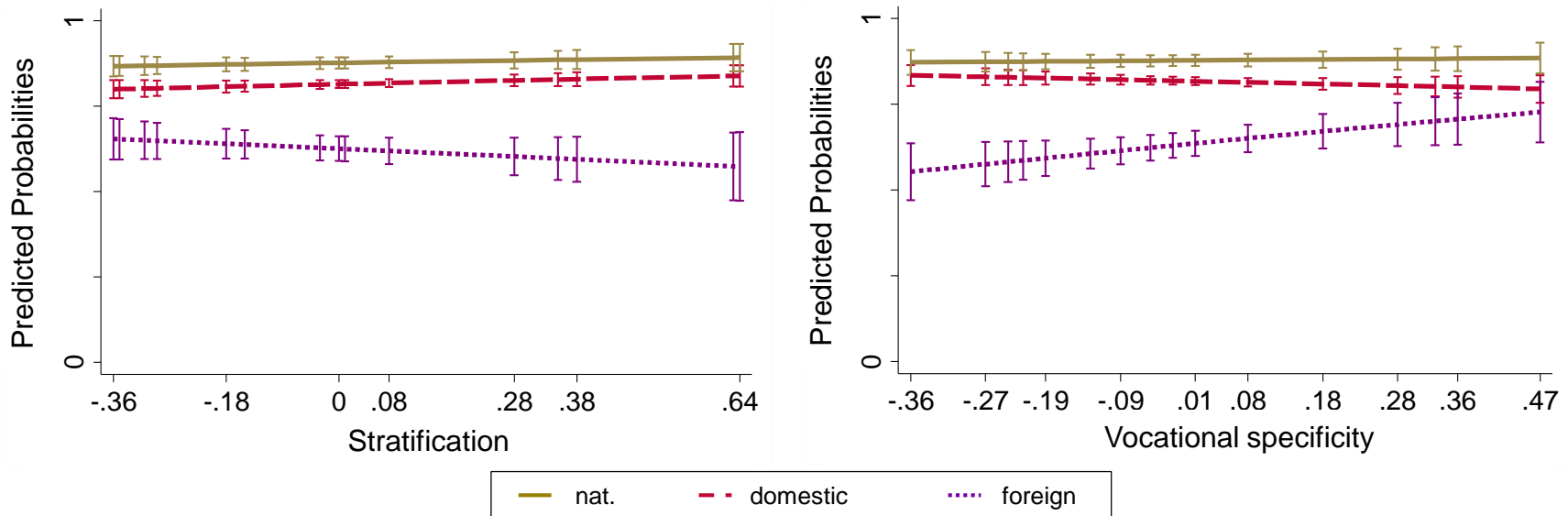
Position of immigrants with foreign certificates only	H2	Results	
		2-step (Plots)	1-step
Stratification	–	(–)	
Vocational specificity	–	(+)	

Note:

Influence of stratif. / voc. specif.:
 ,+‘ = positive;
 ,(+)‘ = rather positive;
 ,–‘ = negative;
 ,(-)‘ = rather negative.

One-step Multi Level Analysis

Position by stratification, vocational specificity and migrational status
(predicted probabilities)



Note: Result of multi level regression. Controls individual level: level of education, age, origin, duration of residence, sex, reference year, immigration status*level of education; controls context level: flexicurity. Cross-level interactions: immigration status*stratification, immigration status*vocational specificity.

Position of immigrants with foreign certificates only	H2	Results	
		2-step (Plots)	1-step
Stratification	-	(-)	-
Vocational specificity	-	(+)	+

Note:
Influence of stratif. / voc. specif.:
,+' = positive;
,(+)' = rather positive;
,-' = negative;
,(-)' = rather negative.

Micro

To what extent do employment positions in Europe differ, according to people's origin and their education's origin?

- natives and immigrants with domestic educational certificates have on an average higher positions than immigrants with foreign certificates only
- Education's origin is more important than person's origin
 - High educational credentials do not guarantee a successful labour market integration
 - Immigrants require educational certificates with strong "signalling power" resp. host country specific knowledge and skills

Macro

In how far can country-differences be explained by differences in host countries' education systems?

- **As expected:** employment positions of **immigrants with foreign educational certificates only** are lower in a stratified context compared with low **stratification**
- **Contrary to expectations:** employment positions of **immigrants with foreign educational certificates only** are higher in a vocationally specific context compared with lower specificity

Thank You
For Your Attention

a.herwig@tu-braunschweig.de