

# International Experiences and Career Success of European Graduates

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# Research Question

- Are graduates with international experiences during the studies more successful in the early working career?
  
- Why are graduates with international experiences more successful in the working career?
  
- Outline
  - Motivation
  - State of research
  - Research gap
  - Theory
  - Data and Methods
  - Results
  - Discussion

# Motivation

- Globalization, Internationalization, Transnationalisation of the European Higher Education System
- Determinants and consequences of international mobility of students and graduates are of fundamental interest
- At macroeconomic level it deals with the mobility of high skilled workers (Brain drain, Brain gain)
- But what we know at the individual level?

# Consequences of international experiences I

- Schomburg/Teichler (2008): No direct effect of international experiences on employability and career success in the early working career
- There is a small effect of international experiences on entry salaries, that can not be interpreted causally (Messer/Wolter 2007, Wiers-Jennsen 2011)
- But:

# Consequences of international experiences II

- Improvement of foreign language skills
- Improvement of soft skills like intercultural awareness, adaptability, flexibility (Janson/Schomburg/Teichler 2009)
- International networking contacts (country of destination, other countries but also with students of the same nationality) (Janson/Schomburg/Teichler 2009)
- Increased job search distance (Kratz 2012)
- Increased probability of being internally and internationally mobile during their career (Falk/Kratz 2009; Parey 2008).
- Increased probability of working in internationally orientated companies (Schomburg/Teichler 2008)
- Exchange semesters are associated with a greater probability of beginning a PHD (Messer/Wolter 2007)

# Research gap

- Analysis of the effect of international experiences of European graduates on wage levels after 5 years and wage growth
- Embedd the phenomenon of international experiences of European graduates in a theoretic framework and derive hypotheses about mechanism why they shall have higher wages in the long run
- Control for heterogeneity as graduates with international experiences during studies are a selective group (Ballatore, 2009; Lörz/Krawietz 2011; Parey/Waldinger 2008) for example but not exhaustive :

*Social background, Language competences , Marks at secondary education, Migration propensity.....etc.*

# Theory I: Can we talk about „transnational capital“?

- Human Capital theory:
  - Additional study
  - Language competencies
  - International scope of organization
- Job search theory (lower search costs)
  - Migration experiences are associated with lower search costs
- Combination of human capital migration model and spatial job search
  - Spatial mobility, job change
  - GDP, Agglomeration
- Network effects (Burt 1992, 2001)
  - Structural wholes
- Signalling approach (Hillmer 2002)
  - Private sector, firm size

# Theory II: Mobility during educational career

**Favorable social background characteristics**

**Mobility experiences**

- Childhood
- School to studies
- During studies
- Studies to work
- Career

**Information costs (-)**

**Location specific capital (-)**

**Relocation costs (-)**  
**search costs (-)**

**Spatial Dispersion of social capital (+)**

**Social capital (+)**

**Migration propensity (+)**

**Spatial range of Job offers (+)**

**Job hopping (+)**

**Screening devices (+)**



# Hypotheses I

H1: Spatial mobility during the higher education system is associated with higher wage levels and wage growth (Repeat Migrant, Late Migrant, Sticker, Return Migrant vs. Stayer (see Faggian 2006))

H2: Graduates with international experiences have higher wage levels and higher wage growth than conventional graduates

Further aim: Try to estimate relative importance of theoretical mechanism for career success of international experienced graduates

# Data and Methods

- REFLEX data: France, Italy, Spain (NUTS 2 Codes)
- OLS model on wages
  - log hourly entry wages
  - Log hourly wages after 5 years
  - Log of hourly wage growth
- Control variables:
  - Gender, social background, relative mark, years of higher education, course of study and country dummies
- Transnational capital variables:

Human Capital Theory	Job search theory	Region	Network	Signalling
Additional study (additional higher diploma after study)	Mobility types	City	Combinaison of 2 variables	Firm size
Language competences (self assessment 7 scales)	Spatial mobility	Gross Domestic Product of region		Private sector
International organization (scope of organisation 5 years after graduation)	Job change (Number of employers)			

# NUTS 2 level Europe



# Specification on mobility variables

## Mobility types

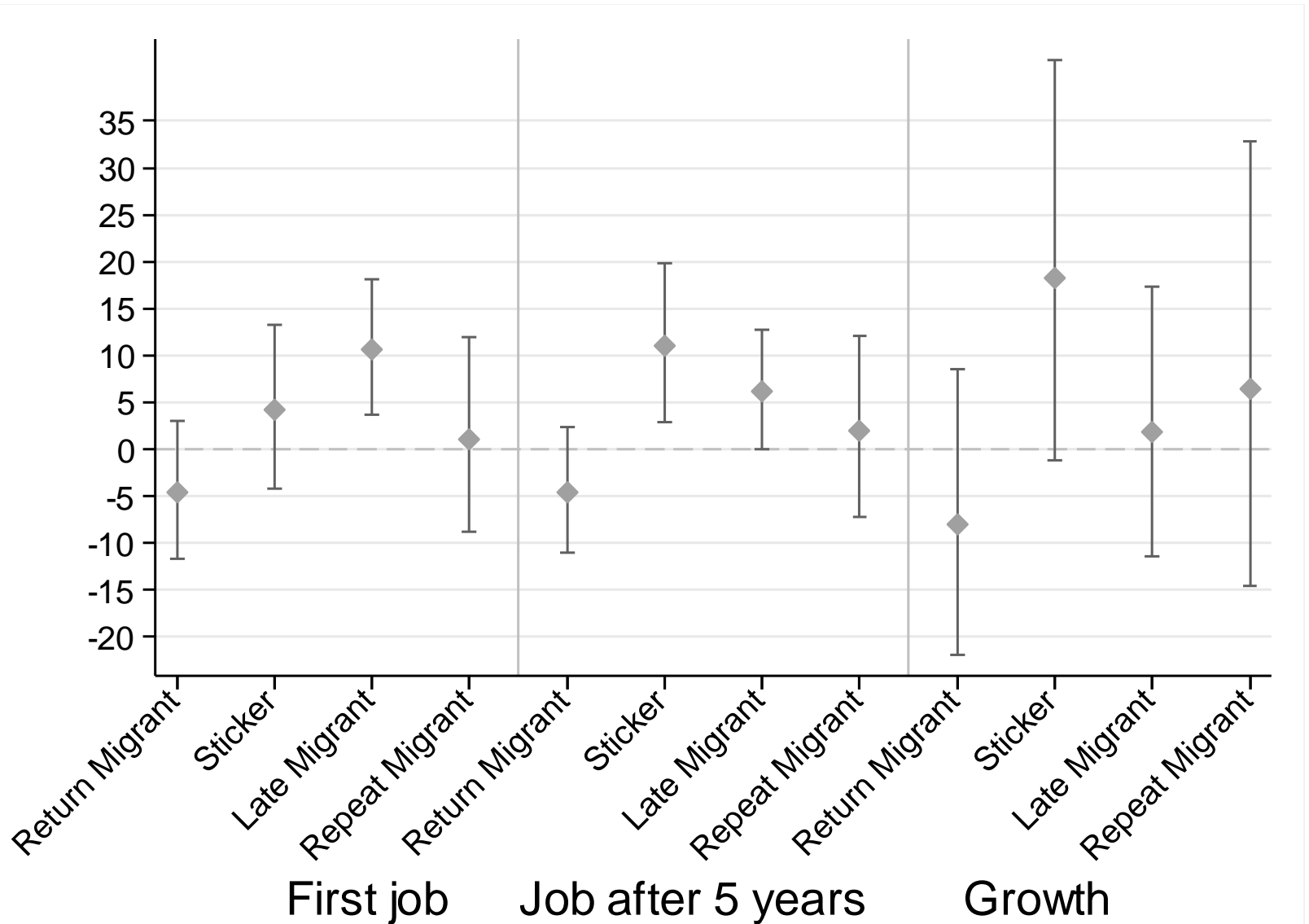
<b>TYPES</b>	<b>Region living at age of 16</b>	<b>Region living during studies</b>	<b>Region living at first employment</b>
Repeat migrant	NUTS2	≠ NUTS2 at 16	≠ NUTS2 at 16 and studies
Return migrant	NUTS2	≠ NUTS2 at 16	=NUTS2 at age of 16
Sticker	NUTS2	≠ NUTS2 at 16	= NUTS2 during studies
Late mover	NUTS2	=NUTS2 at 16	≠ NUTS2 during studies
Stayer	NUTS2	=NUTS2 at 16	=NUTS2 during studies

## Spatial mobility

<b>Spatial Mob</b>	<b>Region living at first employment</b>	<b>Region of employment 5 years after graduation</b>
1	NUTS 2	≠NUTS 2 Region living at first employment
0	NUTS 2	= NUTS 2 Region living at first employment

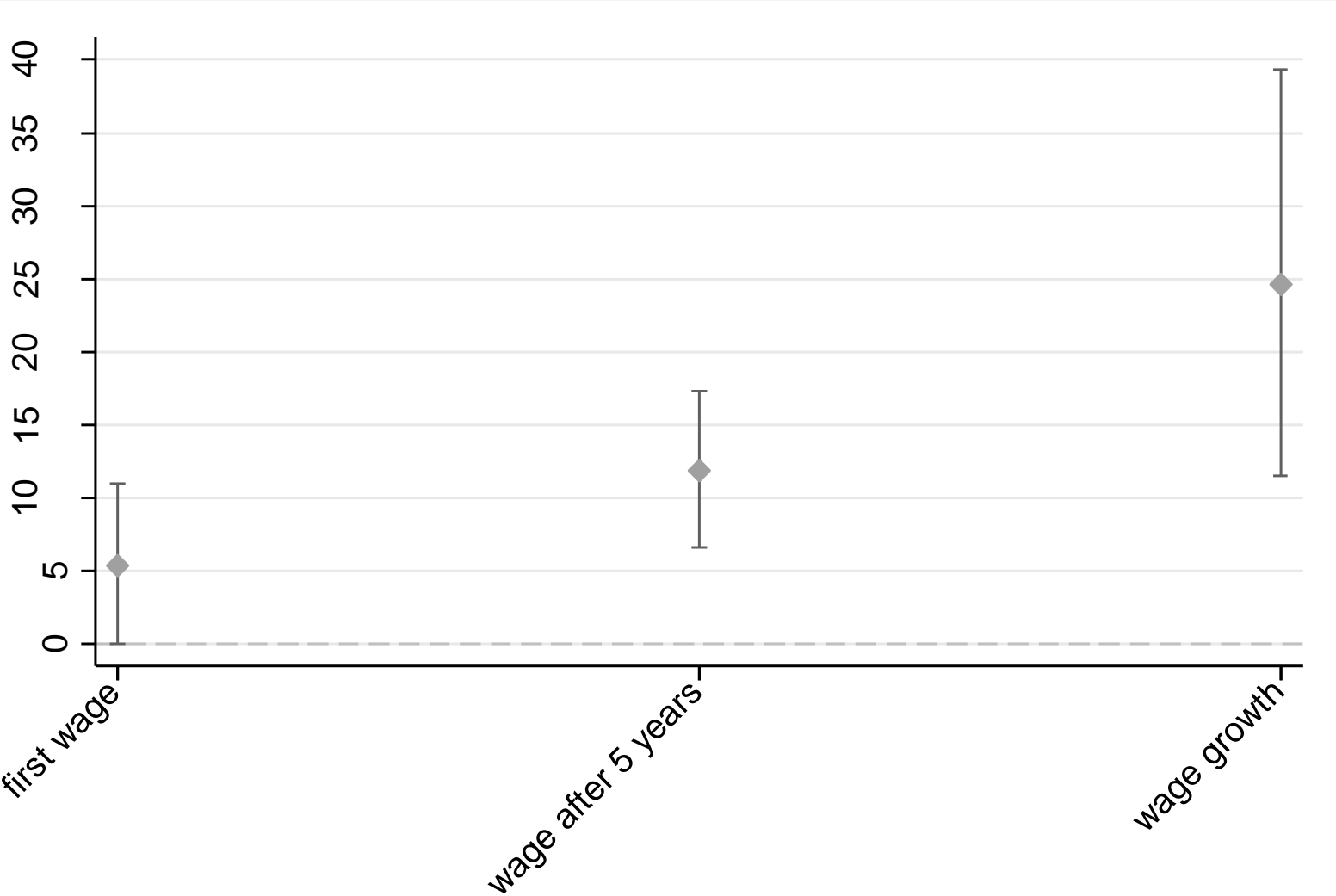
# Results I: Mobility Types and Wages

# Results: Wage Level and Wage Growth Effects



## Results II: International experiences and Wages

# Results: Wage Level and Wage Growth Effects



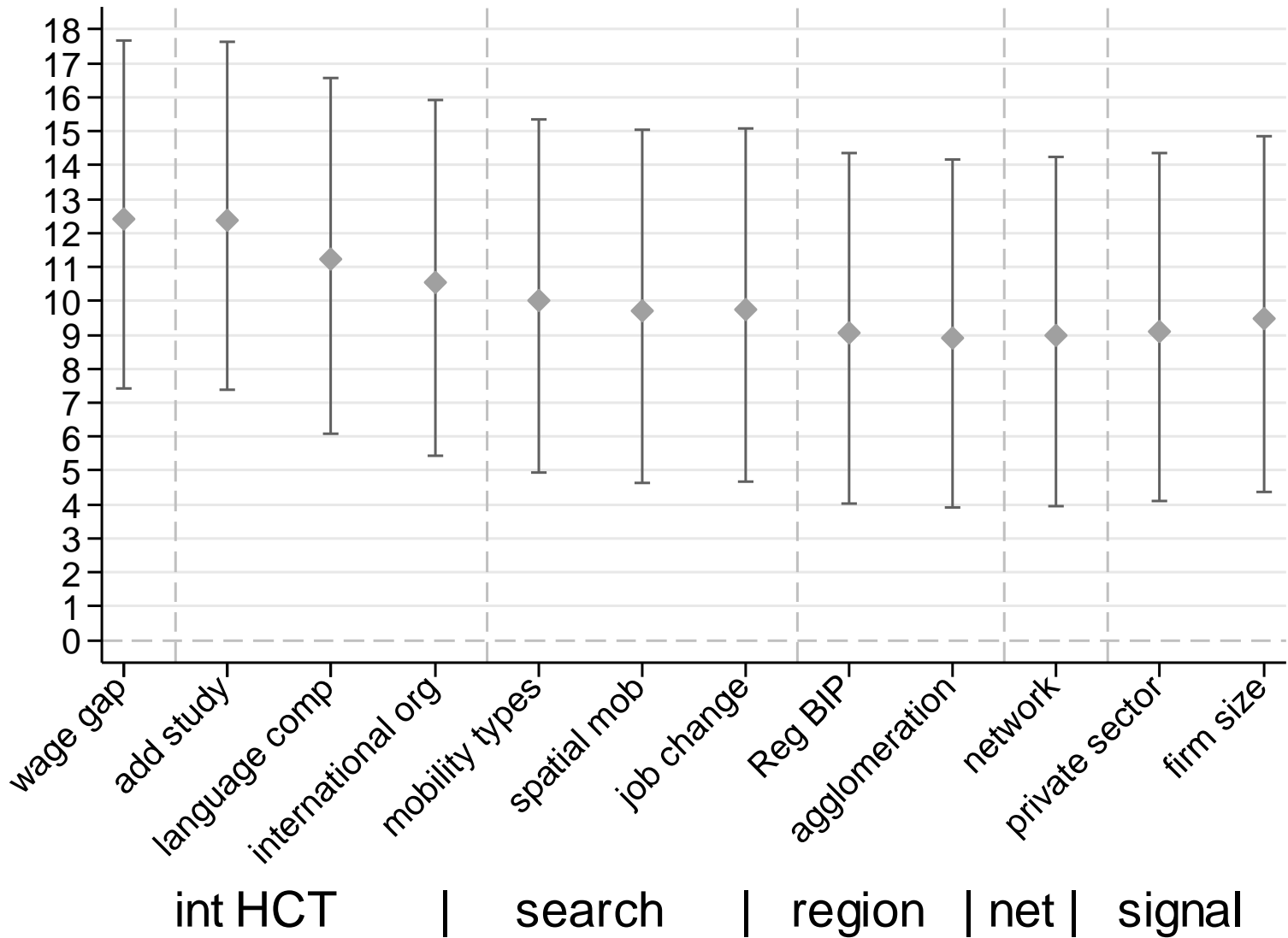
Pecuniary returns to international experiences



# Results II: International experiences and Wages

## Mechanisms

# Results: Mechanisms



# Conclusion I

- The wage differential between students with international experiences during studies and stayers increases with time in the working career in France, Spain and Italy (Same results with BAP and HIS data for Germany)
- Having in mind the social selectivity of international experiences this effects leads to increased inequality
- Mechanism (Human Capital theory, Job search, Networks, Region, Signalling)

# Discussion I

- Different returns to international experiences and spatial mobility for
  - Different field of studies
  - Countries
  - Country where the international experiences are acquired
- Policy implications
  - „Mobilized by mobility“ as a slogan to make advertisement for international exchanges
  - International experiences and spatial mobility during educational system help to reduce mismatch unemployment (for example Bavaria needs high potential workers)
  - Balance with Brain Drain, Brain Gain
  - Easier access to Erasmus etc. that spatial mobility and international experiences do not broaden social inequalities

# Discussion II

- Spatially mobile graduates are hard to get in studies => conservative measures
- Test of network effects are based on self assessment of the usefulness of networks => explicit test
- Further work on data and methods
  - Include Reputation of Higher Education Institution
  - What role does (unobserved) heterogeneity play? No convincing instruments, Heckmann
  - Further methodological work on mechanism that explain higher wage growth (Oaxaca/Blinder decomposition)