



# Determinants and success factors of interregional mobility processes

Franziska Ganesch, Matthias Dütsch and Olaf Struck  
Professorship of Labour Studies  
Otto-Friedrich University of Bamberg

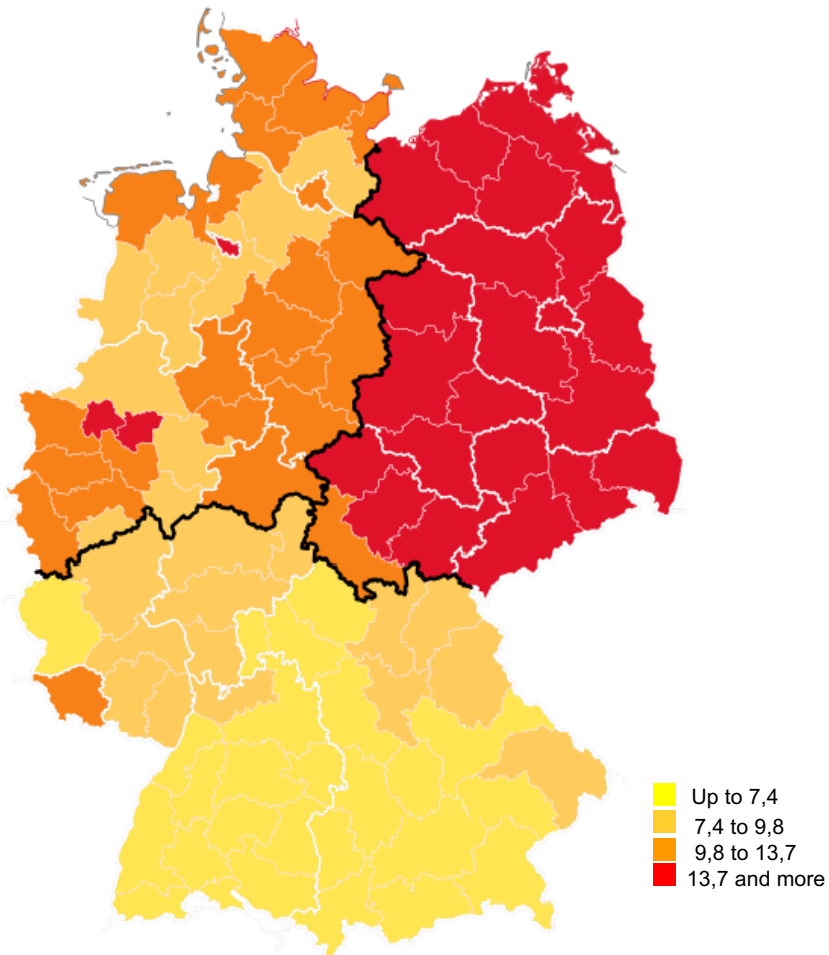
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# Structure

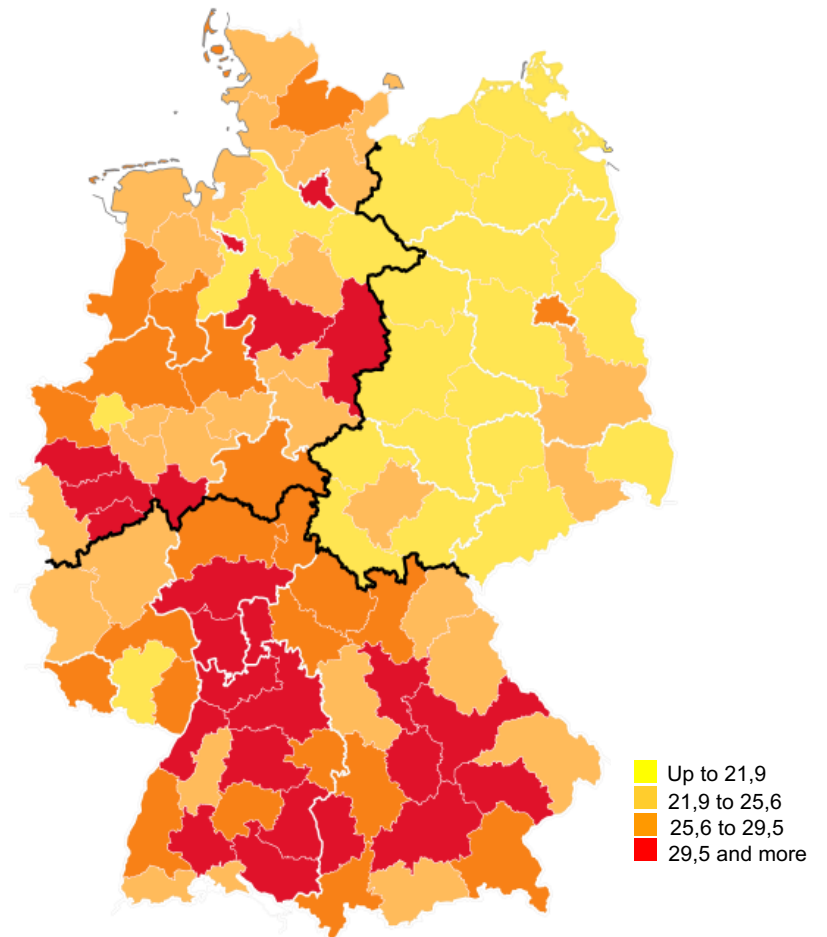
- 1** Initial situation and research question
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  - a) Determinants of regional mobility
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# Initial situation: Regional disparities

unemployment rate (in %)



GDP (in 1000 Euro)



Source: INKAR 2014

# Initial situation and research question

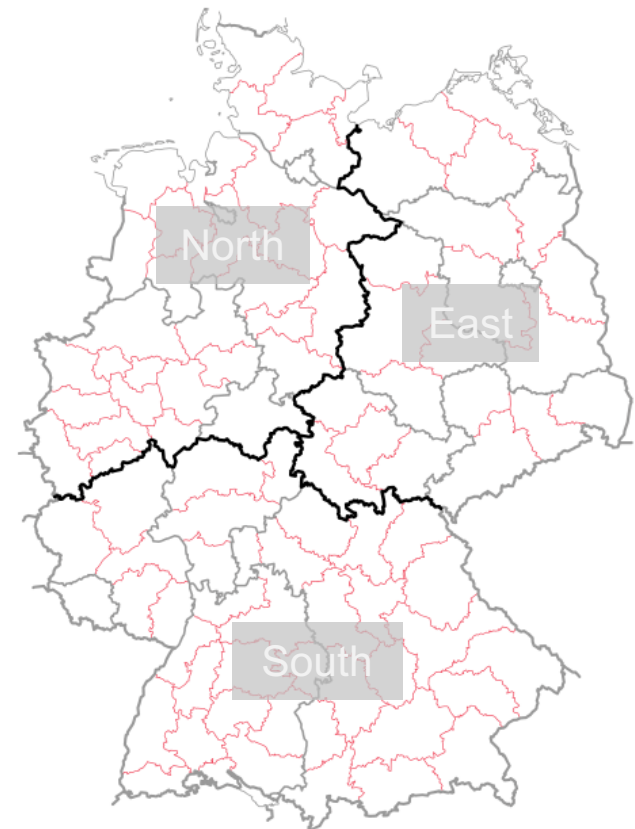
- Which individual, firm- and region-specific determinants have mobility processes within Germany?
- What are the success factors of spatial mobility processes?
- What are the consequences of individual mobility practices in a spatial sense?

# Conception of spatial labor market behavior

**Employment-related regional mobility:**  
spatial change of workplace

## Spatial analysis grid:

- Mobility on the level of **spatial planning regions**
- Mobility between **major regions** (North, South, East)



# Operationalisation: Success of regional mobility

**Income growth** in the course of regional mobility processes

Changes in income are considered as

- **Downward mobility:** Wage decline by more than 5%
  - **Upward mobility:** Wage growth of more than 10%
  - **Lateral mobility** (no substantial changes in income): Increase of income by up to 10% or decrease of up to 5%
- adjusted to the local price level in each case

# Database and method

## **Data:**

- administrative employee data linked to IAB Establishment Panel (LIAB)
- Combined with regional structural indicators (INKAR data of the BBSR) on the level of spatial planning regions via key number of regional districts (called „Kreise“) of workplace

## **Sample:**

- Episodes of full-time-employees aged between 18 and 65 years
- Observation period: 2000-2010

## **Estimation models:**

- Determinants of regional mobility processes: binary logistic regressions
- Success factors of regional mobility : multinomial logistic regressions

# Database and method

## Operationalization of independent variables

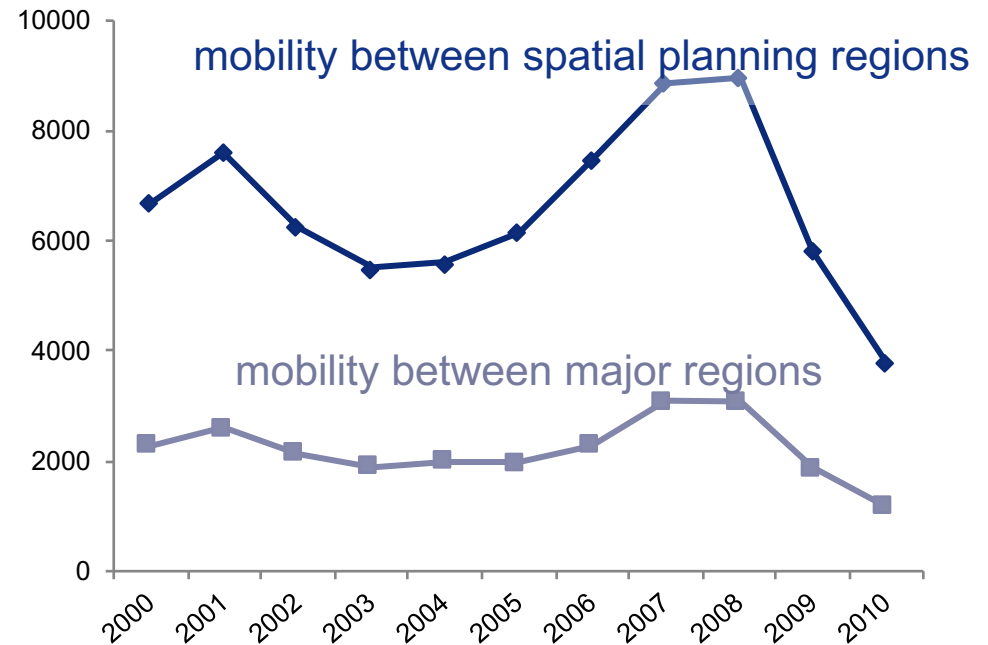
- **individual variables** (sex, nationality, workplace East Germany, age group, highest education level, daytime pay, seniority (entrance < 2 years.; entrance between 2 and 7 years; entrance > 7 years))
- **firm-specific characteristics** (firm size, sector, wage level)
- **regional structural indicators** (measurement level: spatial planning regions)
  - types of region (rural areas, regions with urbanization tendency, agglomeration areas)
  - unemployment rate
  - share of highly qualified employees
  - GDP per inhabitant
  - average wage level
  - distance to the border of the major region
- **Years** (2000 to 2010) coded as dummy variables



# Results: Extent of regional mobility

## Description of inland mobility (2000-2010)

changes in workplace (Period 2000-2010)	
<b>mobility between spatial planning regions</b>	9,57%
<b>mobility between major regions</b>	3,21%
n (total full-time employees episodes)	760361 100%



Source: LIAB (LM 9310), own calculations

# Results: Determinants of regional mobility

## Individual and firm determinants of regional mobility

- Positive effects: With age, professional qualification level and income the probability of regional mobility increases
- In long-term employments, the probability of being mobile is significantly lower than in short-term employments
- Women have a lower mobility probability
- **Firm characteristics:**
  - the size and the level of income have no impact
  - sectoral effects: Trade and business-related services have a positive influence on mobility

# Results: Determinants of regional mobility

## Regional structural characteristics and the business-cycle:

- **local economic performance** encourages mobility;
- Rural areas are comparatively rarely left;
- **regional unemployment level:**
  - age-selective effect: Employees under the age of 35 leave areas with a weak labor market structure
  - Additionally, for large-scale regional mobility: Educational effect: particularly those without vocational qualifications leave regions with a high level of unemployment
  - There is no influence on the regional human capital infrastructure and the local prosperity level
- **distances:** wide linear distances (of more than 100 km) to large region boundaries impede being mobile across this border;
- **procyclical spatial mobility behavior:** During the economic downturn at the beginning and at the end of the observation period the probability of interregional mobility is significantly lower;

# Results: Success of regional mobility

Vertical mobility in the course of regional mobility processes (2000-2010)

price-adjusted				
	<b>Lateral mobility</b>	<b>Downward mobility</b>	<b>Upward mobility</b>	<b>Total</b>
<b>Mobility across spatial planning regions</b>	12844	15906	28768	57518
	22,33%	27,65%	50,02%	100,00%
<b>Mobility across major regions</b>	3341	4491	8142	15974
	20,92%	28,11%	50,97%	100,00%

Source: LIAB (LM 9310), own calculations

# Results: Success of regional mobility

## Individual and firm-specific success factors:

- **Well-qualified and younger workers** are more likely to reach income growth and are more likely to be protected from downward mobility;
- **Women** have lower chances of upward as well as downward mobility;
- Medium- and long-term employed workers have a lower probability of loss of income and higher chances of increasing their income substantially;
- Large- and high-wage companies favour substantial income rises;
- **Sectors:** Target sectors in the primary sector and in (business-related and other) services increase the risk of decline compared to the manufacturing sector; in the fields of construction, trade, (near-home and other) services the chances for upward mobility are lower;

# Results: Success of regional mobility

## Regional structural indicators and business cycle

- **regional context of the target firm** is hardly significant for an immediate change in income; with the exception of:
  - Target areas characterized by a comparatively high economic power and high human capital features reduce the probability of income growth;
  - Even academics who are mobile in areas with a high regional human capital infrastructure have lower chances of upward mobility;
- **business cycle:**
  - During periods of economic growth (from 2003 to 2010) the probability of upward mobility is higher;
  - Economic downturns caused by the global economic crisis in 2009 do not have any negative impact on vertical mobility;

# Summary

- Especially **qualified and younger employees are mobile**;
- In particular, the **local labour market situation** has a **age-selective effect** on the probability of interregional mobility; Consequently, the economic differences in space tend to reproduce or intensify; **No single-track Brain Drain** in direction of agglomeration areas on the level of spatial planning regions ascertainable;
- For regional mobile employees, there is an increased risk of downward mobility as well as a higher chance for upward mobility;
- **Success factors** of spatial mobility are **vocational qualifications as well as characteristics of the target firm** (size and wage level);
- Target regions with a strong economy and high human capital features reduce the immediate chances of upward mobility;  
→ further research: which groups of employees can generate income increases in the target area while staying in this area

# Thank you for your attention!

Ganesch, F., M. Dütsch und O. Struck, 2017: Regionale Mobilität am Arbeitsmarkt: Individuelle, betriebliche und wirtschaftsstrukturelle Determinanten von Mobilität und Einkommen, Working Paper – NO. 21 – 2017

Ganesch, F., M. Dütsch und O. Struck, 2017: Regionale Mobilität und Ungleichheit. Ursachen von Mobilität von Beschäftigten und Folgen für Wirtschaftsregionen, Working Paper – NO. 22 - 2017

matthias.duetsch@uni-bamberg.de  
franziska.ganesch@uni-bamberg.de  
olaf.struck@uni-bamberg.de