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**Career Paths of Higher Education Graduates:
The Role of Internal Labour Markets and
Career Mobility for Income Growth**

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Higher education and labour markets

- Massification of HE and crowded graduate labour market (Tomlinson 2012)
- New forms of Higher Education institutions and degree provisions lead to more heterogeneity by graduates (Scott 2005)
- Globalisation and flexibilisation of work (Blossfeld et al. 2006)
- Concept of boundaryless career emphasizes that career is not bound to a single organization (Arthur/Rousseau 1996)

Higher education and labour market in Germany

- Strong link between higher education system and the labour market
- Important role of professions for career success (e.g. medicine, law)
- Low mobility between labour market segments
- Great differences concerning the career outcomes of higher education graduates due to fields of study

What we know about careers of higher education graduates:

- Higher proportion of graduates of the humanities in status-inadequate jobs (Fehse/Kerst 2007; Leuze/Strauß 2008)
- Precarious labour market entry of graduates of the humanities (Falk et al. 2007)
- Low unemployment rate of higher education graduates (Schomburg/Teichler 2007)
- Great income differences between graduates of different fields of studies (Reimer et al. 2008; Leuze/Strauß 2009; Haak/Rasner 2009)

1. Which mechanisms explain careers of higher education graduates?
2. Role of job-related characteristics for income growth?
3. Which type of career paths are highly rewarded in the labour market? Careers within an organisation or with changes between employers?

1. Occupation-specificity of education (Werfhorst 2002; 2011)

- Differentiation between general, firm-specific and occupation-specific human capital (Becker 1983)
- Amount of general and occupation-specific human capital differs between fields of study
- Graduates whose educational resources match the type of job have a wage benefit

2. Search theory and job mobility (Burdett 1987; Mortensen/Neumann 1984)

- Matching between workforce and workplace under incomplete information
- Job search will continue until the qualification fits the characteristics of the workplace
- On-the-job-search is correlated with other variables (e.g. income). Lower income of graduates motivates to seek after a better paid job

3. Career paths in internal labour markets (Doeringer/Piore 1971; Leuze 2010)

- Access to entry positions in internal labour markets determines career paths
- Professions in the public sector and in large private companies (as prototypes of internal labour markets) have the strongest continuity and the lowest mobility
- Non-professions especially in the private sector have higher rates of mobility

1. **Occupation-specificity hypothesis:** Lower occupation-specificity leads to lower income
2. **Job mobility hypothesis:** Lower incomes/fixed-term contracts foster employer changes which lead to income growth
3. **Internal labour market hypothesis:** Graduates of professions and from high occupation-specific fields of study benefit from internal labour markets through income growth

Bavarian Graduate Panel (German: BAP):

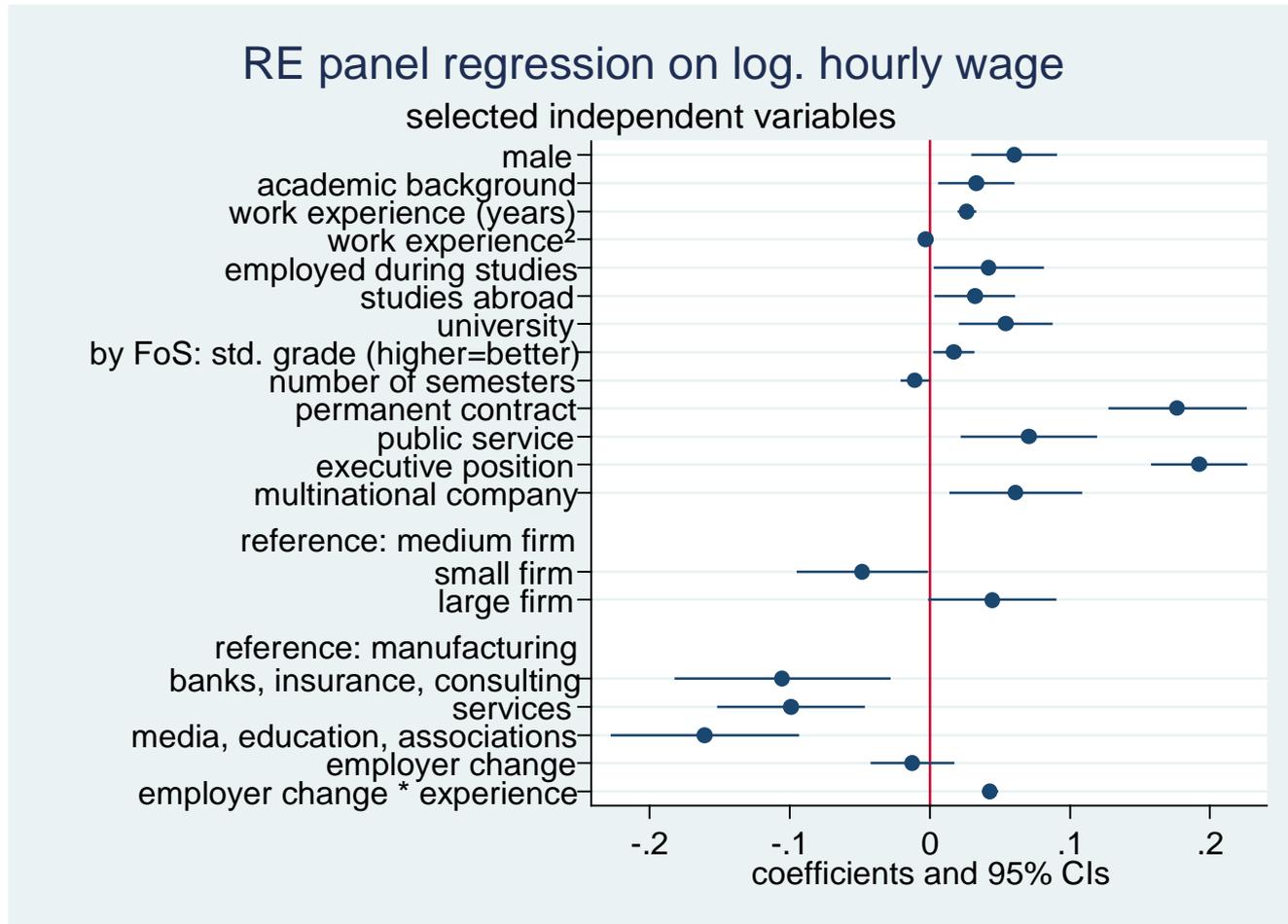
- Longitudinal Survey of Higher Education graduates in Bavaria (Universities and Universities of Applied Sciences)
- Graduation cohort 2005/06
- First and second wave (approx. 1 and 6 years after graduation)
- Data for employment characteristics on a monthly basis
- N = 2,243

Dependent Variable:

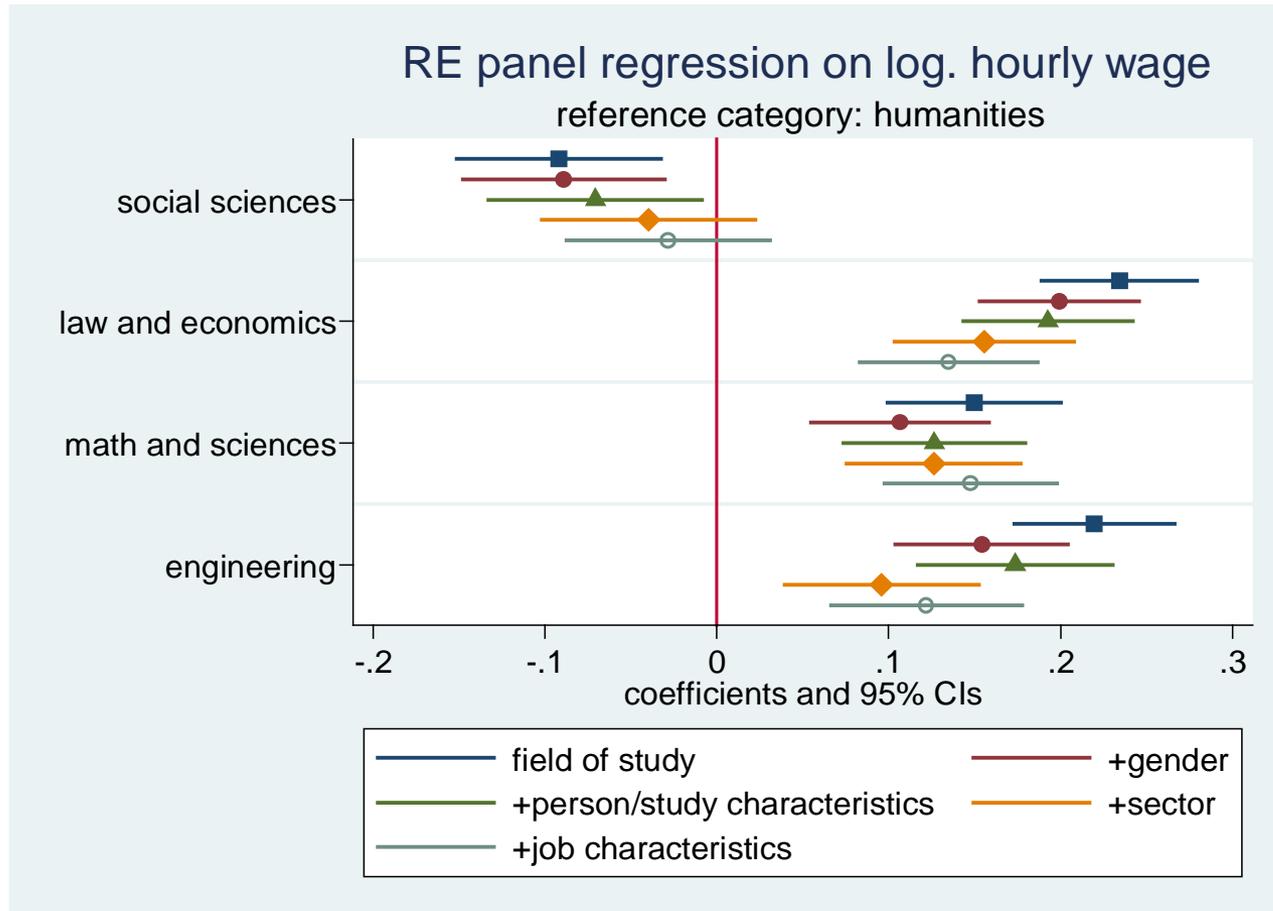
- Income during the first years after graduation

- replication of previous results:
 - already at career start lower incomes especially for humanists and social scientists
 - less often permanent contracts in first job, compared to >85% for engineers
 - differences in professional adequacy
 - more complicated situation for fields of study with low occupation-specificity

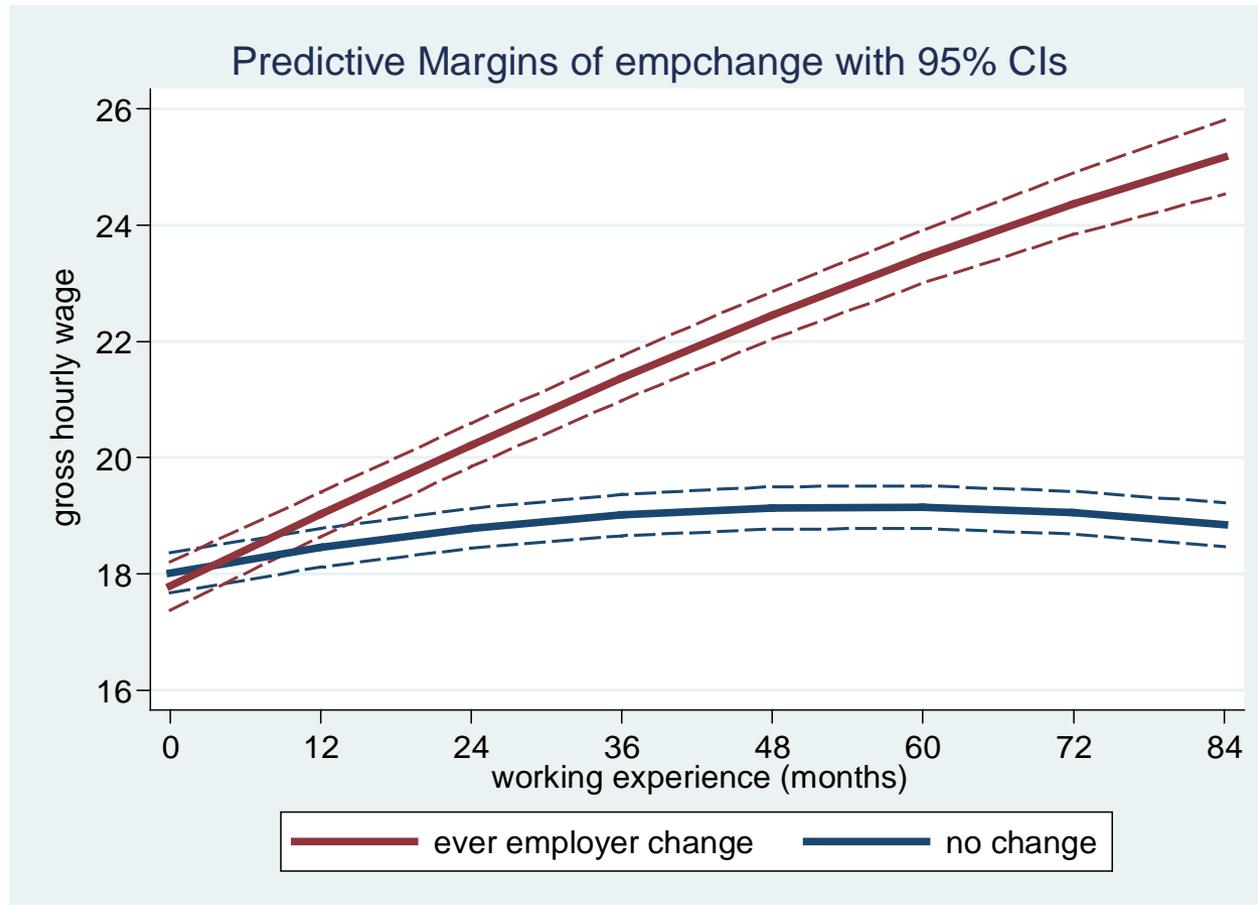
- Significant, but comparatively small effects of study-related variables; job characteristics dominant



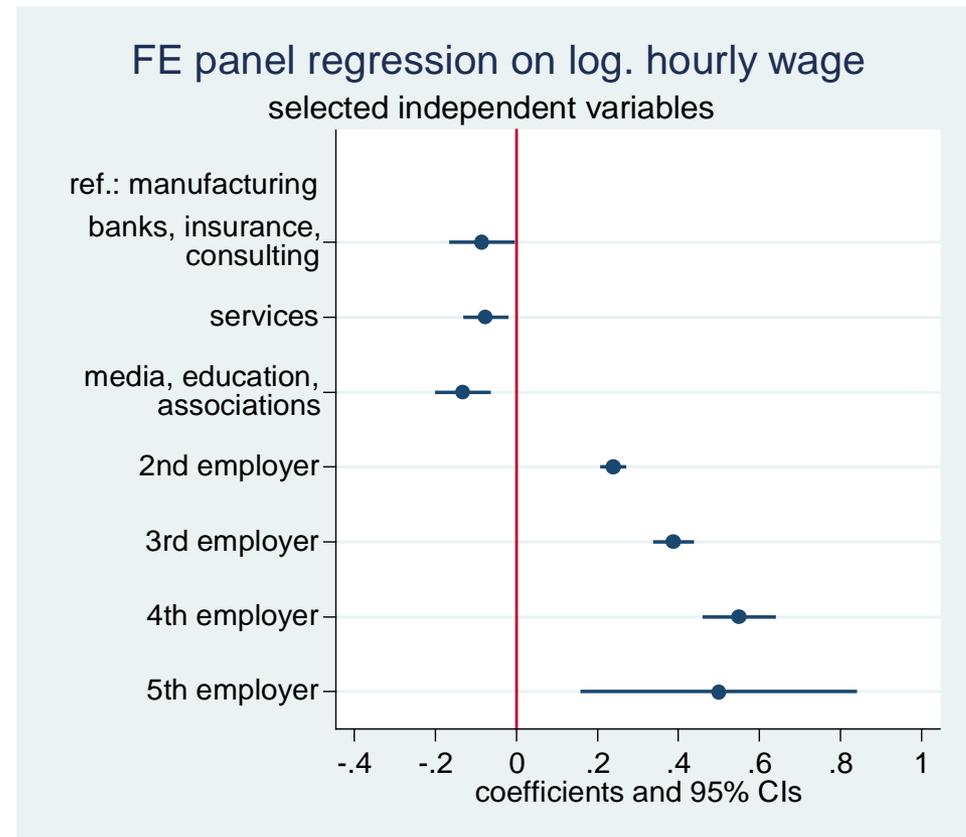
- Wage disadvantage for graduates of humanities and social sciences partly explained by gender and occupational sectors



- Furthermore, employer changes of particular importance for all graduates



- If internal labour market is entered right after graduation (e.g. many engineers), employer changes are less common
- Humanists achieve wage gains more often by changing employer
→ Significant gains for all groups



1. **Occupation-specificity hypothesis:** Great income differences between 1) humanists and social scientists and 2) engineers, natural scientists and economists. No compensation of low wage levels at entry job
2. **Job mobility hypothesis:** Higher job mobility of humanists and social scientists due to scarcer presence in internal labour markets
3. **Internal labour market hypothesis:** Internal labour markets offer higher starting salaries, but lower income growth. Graduates of all fields of study benefit from employer changes