

IHF Bayerisches Staatsinstitut für
Hochschulforschung und Hochschulplanung

**Labour market returns to the "new"
Bachelor and Master degrees in Germany**

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International Graduate Employability: Trajectories and
Performance. Workshop 2: Drivers for Change

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Research questions **IHF** Bayerisches Staatsinstitut für
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**Income of BA and MA graduates in the first
years after graduation:**

- Which differences exist at the career start?
- How do these differences change over time?
- Are there differences between fields of study?

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The "new" degrees **IHF** Bayerisches Staatsinstitut für
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- Before: Long one-cycle degrees ('Diplom', 'Magister', and 'Staatsexamen')
- Now: BA (3 – 4 years), MA (2 years)
- 2016: 81 % of graduated with BA or MA
- Transition rates into MA:
 - 44 percent at Universities of Applied Science
 - > 80 % at Research Universities
 - Strong variation by study field

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State of research IHF Bayerisches Staatsinstitut für Hochschulforschung und Hochschulplanung

- Income differences between graduates of different fields of studies
- First income is lower for BA compared to MA degree holders
 - True for graduates in most (all?) fields of study
 - True for graduates from both University and University of applied science
- The SIZE of income differences between BA and MA degree holders depends on the field of studies

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Research questions IHF Bayerisches Staatsinstitut für Hochschulforschung und Hochschulplanung

Income of BA and MA graduates in the first years after graduation:

- Which differences exist at the career start?
 - For MA graduates: higher starting wages
- How do these differences change over time?
 - They might increase
 - They might decrease
 - They might not change much
- Are there differences between fields of study?
 - Probably yes

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Data IHF Bayerisches Staatsinstitut für Hochschulforschung und Hochschulplanung

Bavarian Graduate Panel (German: BAP):

- Longitudinal Survey of Higher Education graduates in Bavaria (Universities and Universities of Applied Sciences)
- Graduation cohort 2008–2010
- First and second wave (approx. 1–2 years and 8 years after graduation)
- Data for employment characteristics on a monthly basis
- N = 2,284 (499 Bachelor; 1,785 Master)

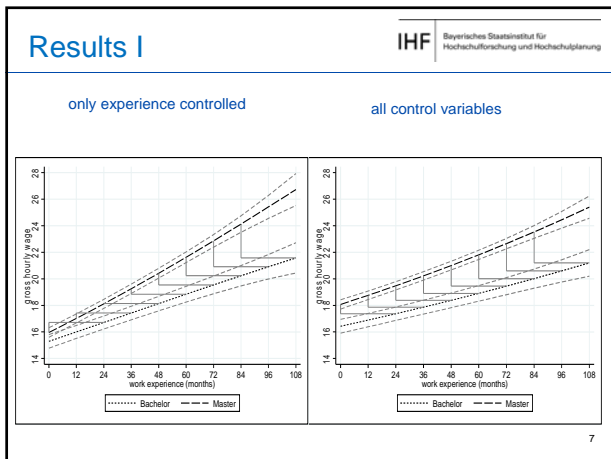
Method: Random Effects growth curves for BA and MA graduates

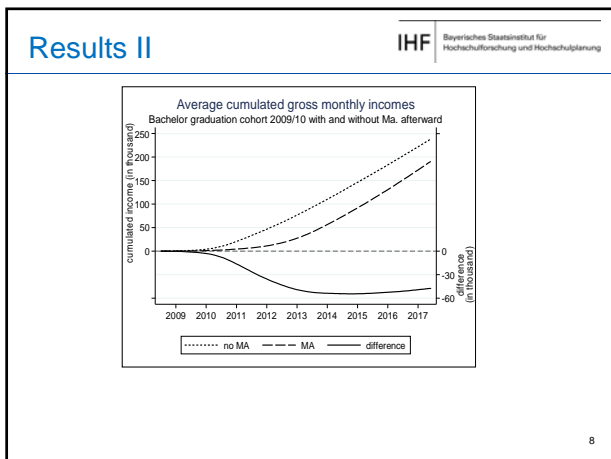
Dependent variable: Log. hourly wage

Independent variables:

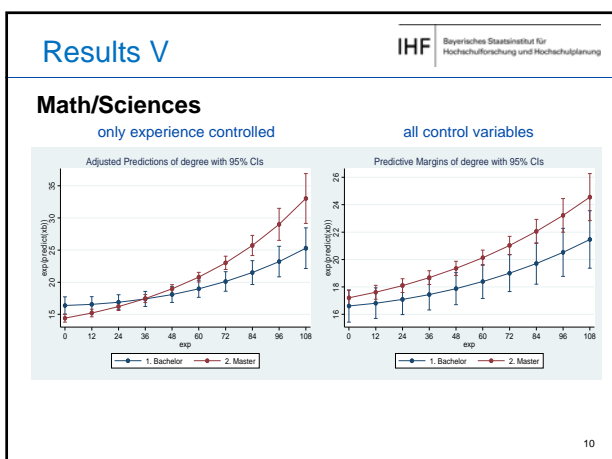
- *time constant:* degree, gender, parental background, grade of school leaving certificate, subject, type of university
- *time variant:* work experience, occup. sector, PhD studies, type of organization/contract, exec. position, firm size, employer change

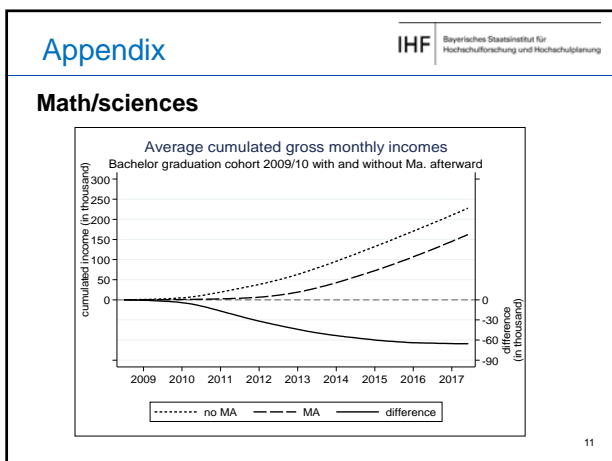
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- ### Results III
- IHF Bayerisches Staatsinstitut für Hochschulforschung und Hochschulplanung
- Subject-specific effects
 - In all cases: MA advantage – if not initially, then after a couple of years
 - Humanities/social sciences: at beginning no MA advantage and no PhD disadvantage
 - Math/Sciences: without control for PhD students MA disadvantage
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Main findings

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- Positive MA effect on wages, increasing over time
- Slowed down by PhD (more income as soon as PhD is *completed*)
- Additional education > earlier labour market entrance / practical experience
- Lifetime earnings gap closes slowly – not within our observation window
- Fields of study: patterns similar, levels and speeds vary
- More data needed to investigate long-term returns of different degrees

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Fabian, G., Hillmann, J., Trent, F., Briedts, K. (2016): Hochschulabschlüsse nach Bologna. Werdegänge der Bachelor- und Masterabsolvent(in)en des Prüfungsjahrgangs 2013 (Forum Hochschule 1|2016). Hannover: DZHW, Leuze, K. (2011): Interne Arbeitsmärkte und die Karrieremobilität von Akademikern und Akademikerinnen in Deutschland und Großbritannien. In: Beiträge zur Hochschulforschung, 32. Jahrgang, 4/2010 24


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Appendix


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	(1)	(2)	(3)	(4)	(5)	(6)
Master	0.045*	0.040*	0.050*	0.060**	0.100**	0.095**
experience	0.004**	0.004**	0.004**	0.004**	0.003**	0.001**
Masterexperience	0.002**	0.002**	0.002**	0.001**	0.001**	0.001**
experience ²	-0.000	-0.000	-0.000	-0.000	-0.000	-0.000
gender: male	0.131**	0.093**	0.103**	0.100**	0.100**	0.078**
acad. background	-0.035*	-0.026	-0.014	-0.009	-0.009	-0.012
A level grade	-0.009	-0.002	-0.064**	-0.067**	-0.067**	-0.067**
humanities		(reference)	(reference)	(reference)	(reference)	(reference)
social sciences		0.003	0.049	0.038	0.041	
law/economics		0.225**	0.213**	0.180**	0.165**	
math and sciences		0.031	0.118**	0.118**	0.113**	
engineering		0.119**	0.091**	0.082**	0.085**	
university		-0.028	-0.017	-0.018		
banking, insurance		-0.107**	(reference)	(reference)	(reference)	
manufacturing			0.203**	0.187**	0.183**	
services			-0.022	-0.012	-0.004	
media, education			0.029	0.067	0.055	
currently PhD stud.			-0.417**	-0.289**	-0.243**	
public service				(reference)	(reference)	
listed company				0.055	0.038	
non-listed company				-0.026	0.005	
non-profit, other				0.027	0.032	
fixed-term contract				-0.242**	-0.191**	
no executive position					-0.163**	
low-level executive					(reference)	
mid/high-level exec.					0.026	
small company					(reference)	
medium company					0.061*	
large company					0.196**	
employer change					-0.154**	
employer change*exp					0.003**	
_cons	2.727**	2.690**	2.733**	2.729**	2.778**	2.860**
N	146,858	146,858	146,858	146,858	146,858	146,858

* p < 0.05, ** p < 0.01, *** p < 0.001

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Results III IHF Bayerisches Staatsinstitut für Hochschulforschung und Hochschulplanung

- Coefficients for MA (vs. BA) for stepwise regression models
- Major change after control for PhD students
- Inconsistent effects of other control variables on coefficient

effects of MA degree on log. hourly wage
coefficients for stepwise regressions with 95% CIs

MA*exp (years)

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Humanities

only experience controlled

all control variables

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Humanities

Average cumulated gross monthly incomes
Bachelor graduation cohort 2009/10 with and without Ma. afterward

change in cumulated income difference
Bachelor graduation cohort 2009/10 with and without MA afterward

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