



INSTITUTE FOR EMPLOYMENT
RESEARCH
The Research Institute of the Federal Employment Agency

THE GENDER WAGE GAP IN GERMANY: UNDERSTANDING THE ROLE OF EMPLOYERS AND FIRM CHARACTERISTICS

Presentation on the Conference “The Gender Wage Gap in Europe:
What Can We Learn Using Linked Employer-Employee Data?”

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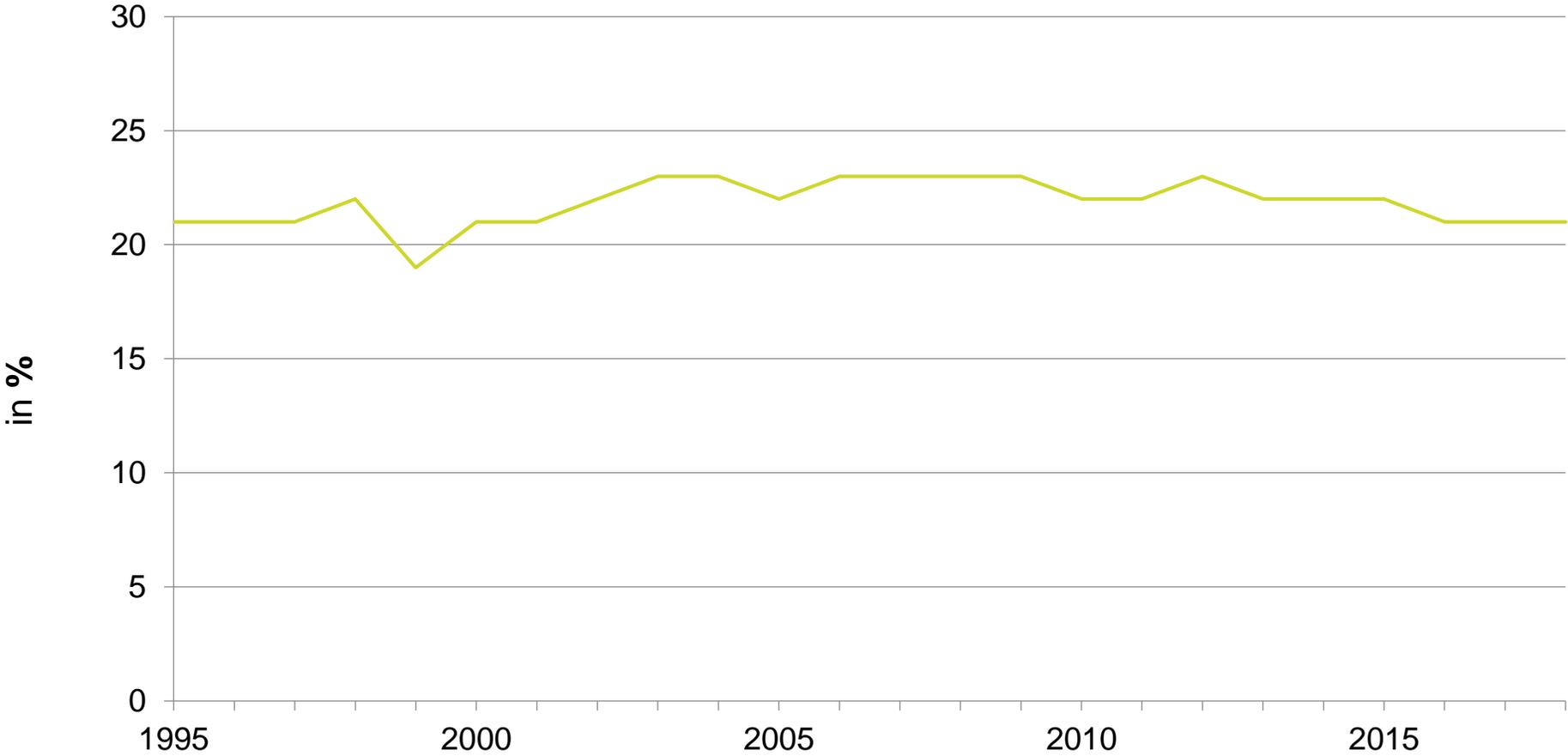
MOTIVATION

- Central gender inequalities in the German labour market have softened over the last decades
 - especially regarding education and labour market participation: Currently, women achieve higher educational attainments than men and represent half of the German work force
- Nevertheless: Women still earn substantially less than men
 - substantial and persistent gender wage gap

THE GENDER WAGE GAP IN GERMANY

THE DEVELOPMENT OF THE GENDER WAGE GAP IN GERMANY

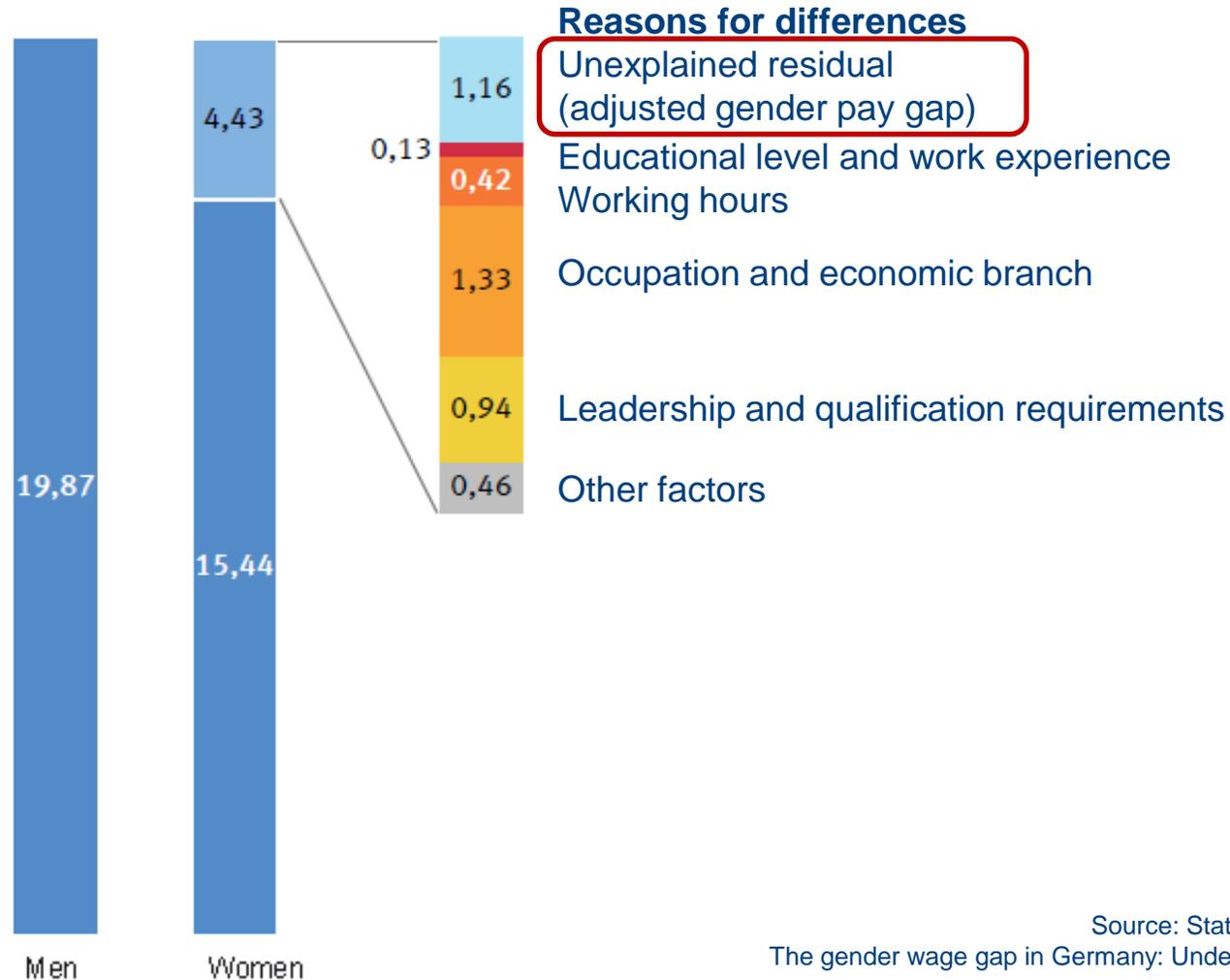
(IN % DIFFERENCE OF GROSS HOURLY WAGES)



Source: Statistisches Bundesamt, 2019.

EARNINGS DIFFERENCES BETWEEN MEN & WOMEN

GROSS HOURLY EARNINGS EUR, IN 2014



Source: Statistisches Bundesamt, Verdienste auf einen Blick, 2017.

RESEARCH QUESTION

RESEARCH QUESTION

How does the employer – and more specific, HR measures of the firm as well as organizational diversity arrangements affect the gender wage gap in Germany?

Do performance related organizational practices relate differently to male and female wages than “non-competitive” practices?

STATE OF RESEARCH

LITERATURE REVIEW: GENDER WAGE GAP

- Firm characteristics
 - Increase of wage inequality within firms, limited effects of firm characteristics on GWG (Antonczyk, Fitzenberger & Sommerfeld 2010)
 - Substantial within firm and job wage gaps (Hinz & Gartner 2005)
 - Smaller within than across GWG, union coverage and works councils are associated with smaller GWG (Heinze & Wolf 2009)
- Females in management position
 - Limited access to managerial positions for women (Hultin & Szulkin 2003)
 - No evidence for lower GWG in firms with female managers (Srivastava & Sherman 2015)
- Organizational practices
 - Practices helping to coordinate work and life have limited or no impact on GWG (Van der Lippe, Van Breeschoten & Van Hek 2018)
 - Mothers return quicker to family friendly establishments (Frodermann et al. 2018)

LITERATURE REVIEW: RISK AND COMPETITION

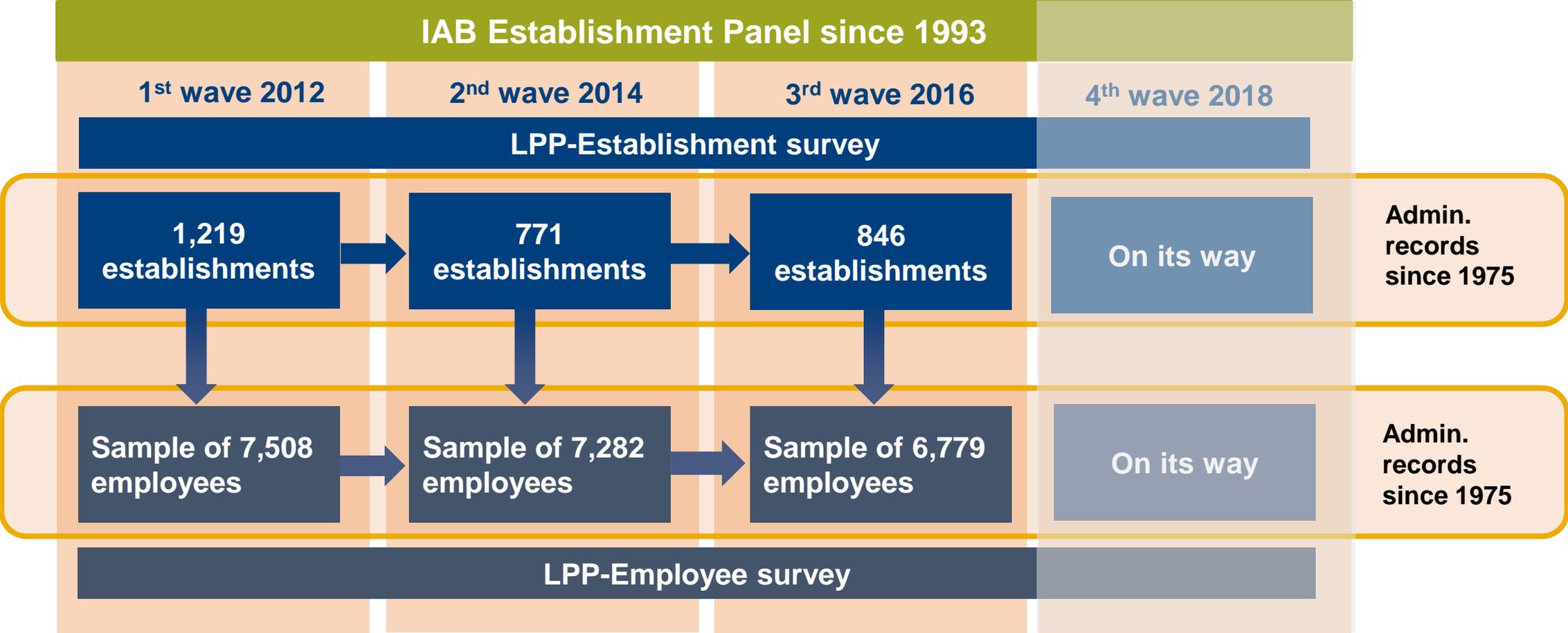
- Women are less favourable to competition (Niederle & Vesterlund 2011, Bertrand 2011; Croson and Gneezy 2009)
- Females have higher risk aversion in general but not visible among professionals and managers (Croson and Gneezy 2009)
- No clear evidence for compensating wage differentials for favourable working conditions
 - No supportive evidence (for US: McCrate 2005, for Sweden: Palme & Wright 1992)
 - Supportive evidence (Goldin 2014, Blau & Kahn 2016, Filer 1985, for New York State Jacobs & Steinberg 1990)

HYPOTHESES

- H1: Organizational characteristics can explain part of the Gender Wage Gap
- H2: Men's wages are positively influenced by performance related organizational practices
- H3: Practices that foster equal opportunities positively relate to female wages
- H4: Flexible working arrangements negatively relate to female wages

THE LINKED PERSONNEL PANEL

STRUCTURE OF THE LINKED PERSONNEL PANEL



DATA I – LINKED PERSONNEL PANEL (LPP)

- Topics of employer survey:
 - recruitment and selection, performance management, talent management and employee development, retention management and corporate culture, firm characteristics
- Topics of employee survey:
 - current job/ working conditions, development and promotion possibilities, subjective job quality, personality, socio-demographics
- Information from IAB Establishment Panel:
 - sales, investments, capital, workforce composition, works council, collective agreement

DATA II – INTEGRATED EMPLOYMENT BIOGRAPHIES (IEB)

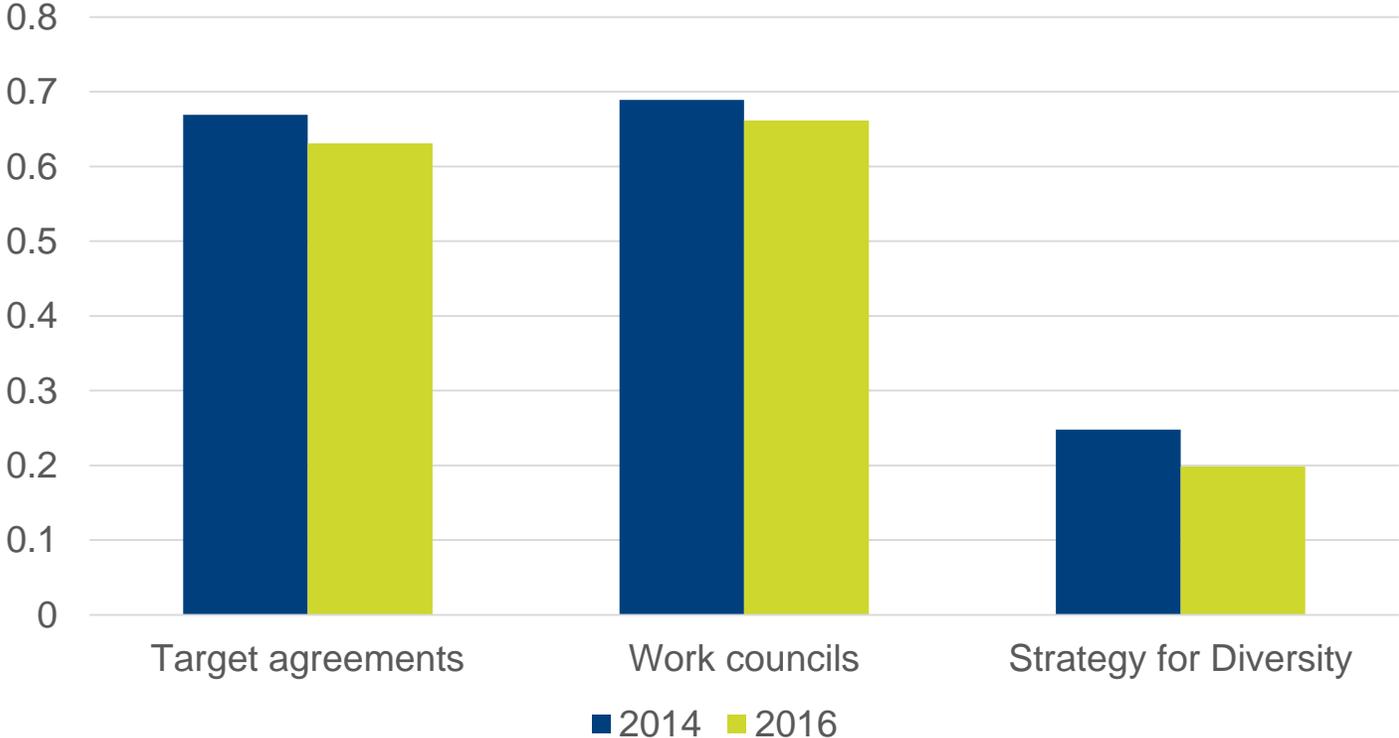
- Survey information of employees are linked to employment records (since 1975 or entry into labour market)
- This administrative data encompasses information on start and end date of employment on a daily basis, sex, education, occupation, wages, unemployment experience, etc.
- Experience can be calculated using administrative data

METHOD

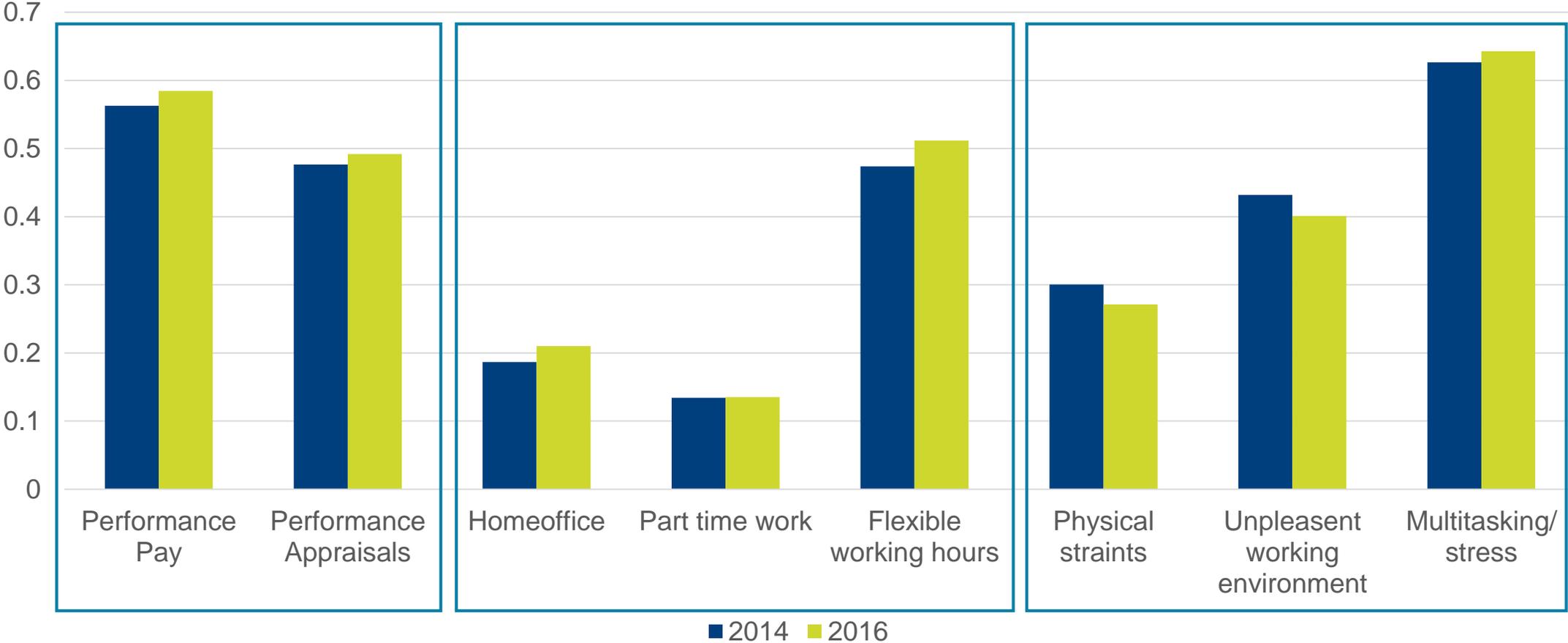
- **Dependent variable:** Log hourly wage
- **Control variables:** Age, age², migration background, educational degree, fixed-term contract, collective agreement, management position, firm size, sector, lives with partner in household, children in household, region
- **OLS models**, separately for men and women in 2014 and 2016 with clustered SE for firms
- **Fixed effect models**, separately for men and women
- **Oaxaca-Blinder decomposition**

DESCRIPTIVES

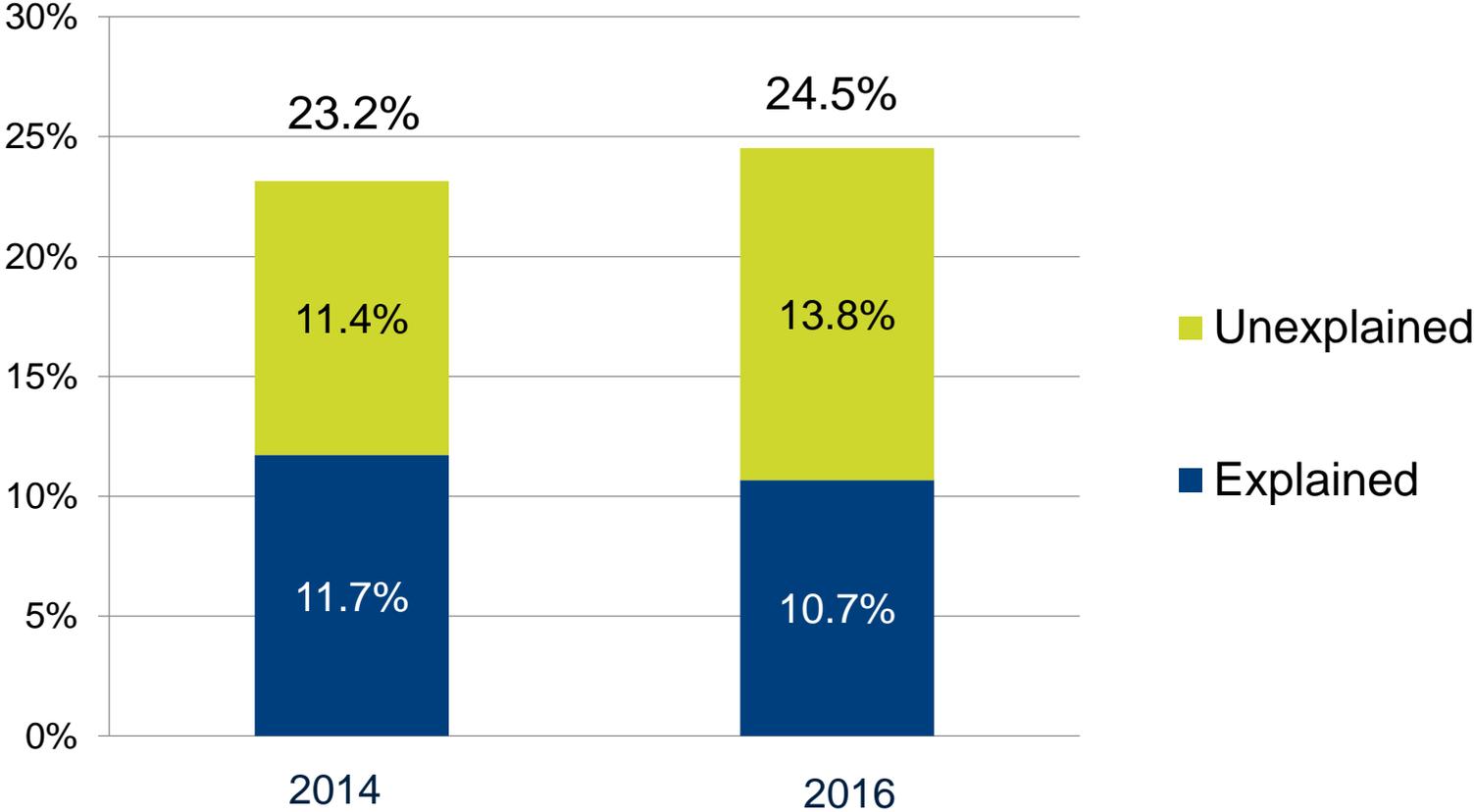
DEVELOPMENT OF ORGANIZATIONAL PRACTICES - ESTABLISHMENTS



DEVELOPMENT OF ORGANIZATIONAL PRACTICES - EMPLOYEES

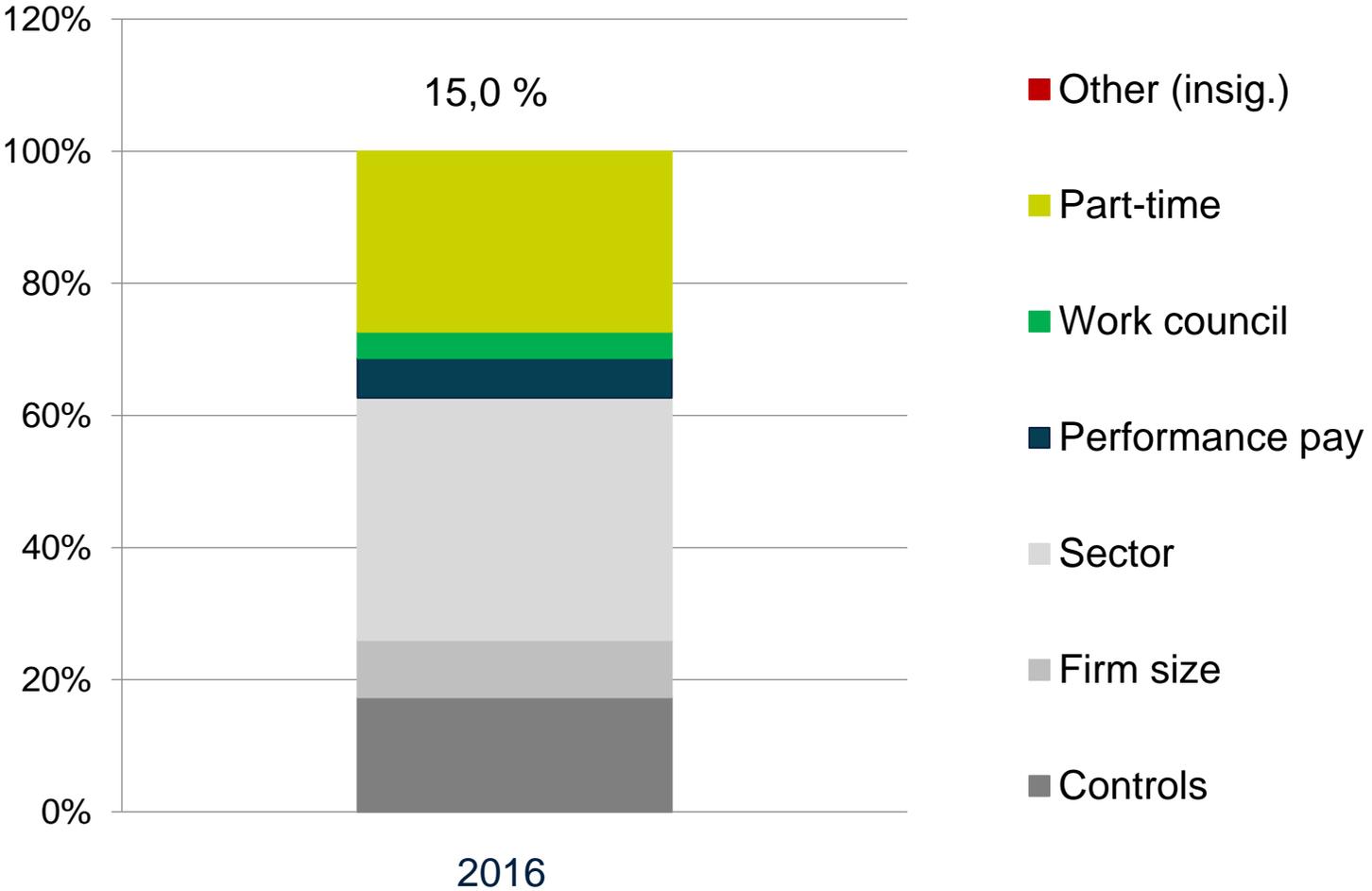


DECOMPOSITION: BASE MODEL



MULTIVARIATE RESULTS

OAXACA-BLINDER DECOMPOSITIONS: EXPLAINED PART



REGRESSIONS, SEPARATELY FOR MEN & WOMEN

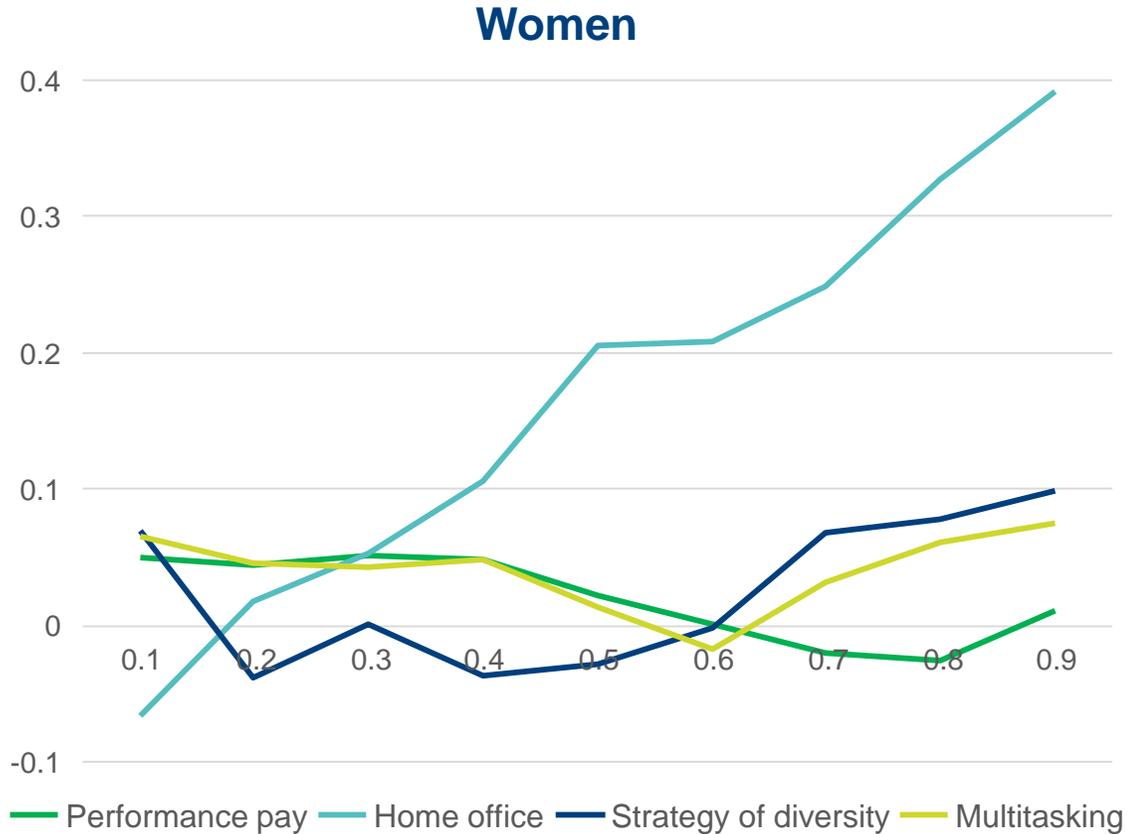
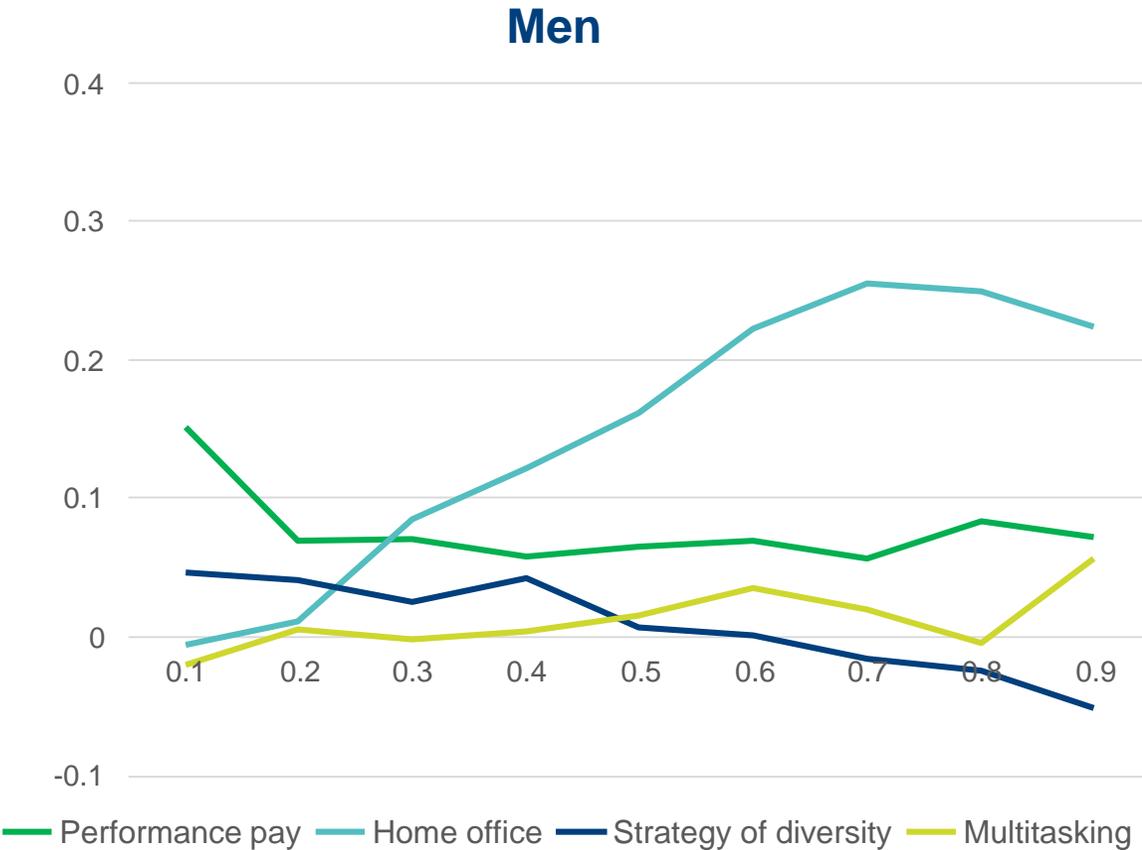
Variables	Base model	
	Men	Women
Age	0.022*** (0.005)	0.047*** (0.010)
Age ²	-0.000*** (0.000)	-0.000*** (0.000)
Education (Ref. Vocational training)		
No educational qualification	-0.072 (0.071)	-0.080 (0.060)
Master craftsman training	0.099*** (0.016)	0.130*** (0.030)
University	0.341*** (0.022)	0.283*** (0.032)
Collective agreement	0.145*** (0.024)	0.136*** (0.038)
Fixed-term contract	-0.067 (0.053)	-0.148** (0.062)
Constant	2.227*** (0.120)	1.745*** (0.270)
N	2416	952

Models also control for: migration background, management position, firm size, sector, lives with partner in household, children in household, region.

Variables	Full model	
	Men	Women
Performance pay	0.081*** (0.014)	0.021 (0.024)
Target agreements	-0.009 (0.022)	0.034 (0.030)
Performance appraisals	-0.006 (0.013)	0.030 (0.025)
Work council	0.100*** (0.030)	0.152*** (0.034)
Home office	0.152*** (0.018)	0.176*** (0.035)
Strategy of diversity	0.004 (0.021)	0.041 (0.031)
Part-time	-0.096** (0.041)	-0.033 (0.025)
Flexible working hours	0.022 (0.017)	0.128*** (0.028)
Working conditions		
Physical effort	-0.087*** (0.017)	-0.132*** (0.032)
Multitasking	0.012 (0.013)	0.043** (0.022)
Unpleasant working environment	-0.017 (0.016)	-0.045* (0.026)

Models also control for:
Age, age², education,
management position,
collective agreement
fixed-term contract
migration background,
firm size, sector, lives
with partner in
household, children in
household, region.

RIF-REGRESSIONS, SEPARATELY FOR MEN & WOMEN



CONCLUSION & OUTLOOK

RESULTS & CONCLUSION

We can confirm...

H1: Organizational characteristics can explain a **small** part of the Gender Wage Gap

H2: Men's wages are positively influenced by performance pay → **endowments & returns**

We find mixed evidence for...

H3: Practices that foster equal opportunities positively relate to female wages

H4: Flexible working arrangements negatively relate to female wages

Conclusion

Organizational practices do not significantly narrow the Gender Wage Gap

OUTLOOK

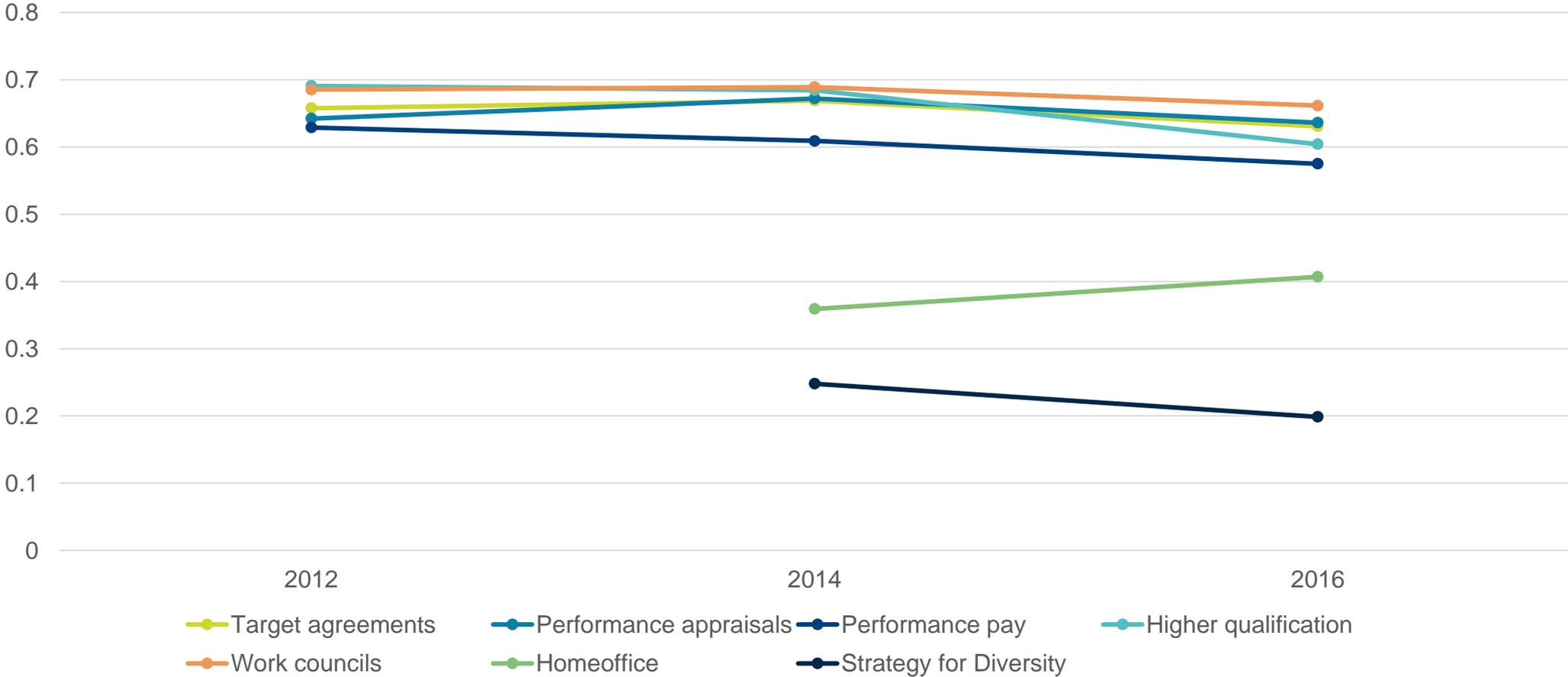
- Exploit the panel dimension
- Employing RIF regression based decompositions to analyse whether particular organizational arrangements are of higher importance for the GWG in specific quantiles
- Considering further personal characteristics of the employees (see e.g. Anger, Laible & Müller 2017) as well as organizational characteristics based on the IAB Establishment Panel

CONTACT

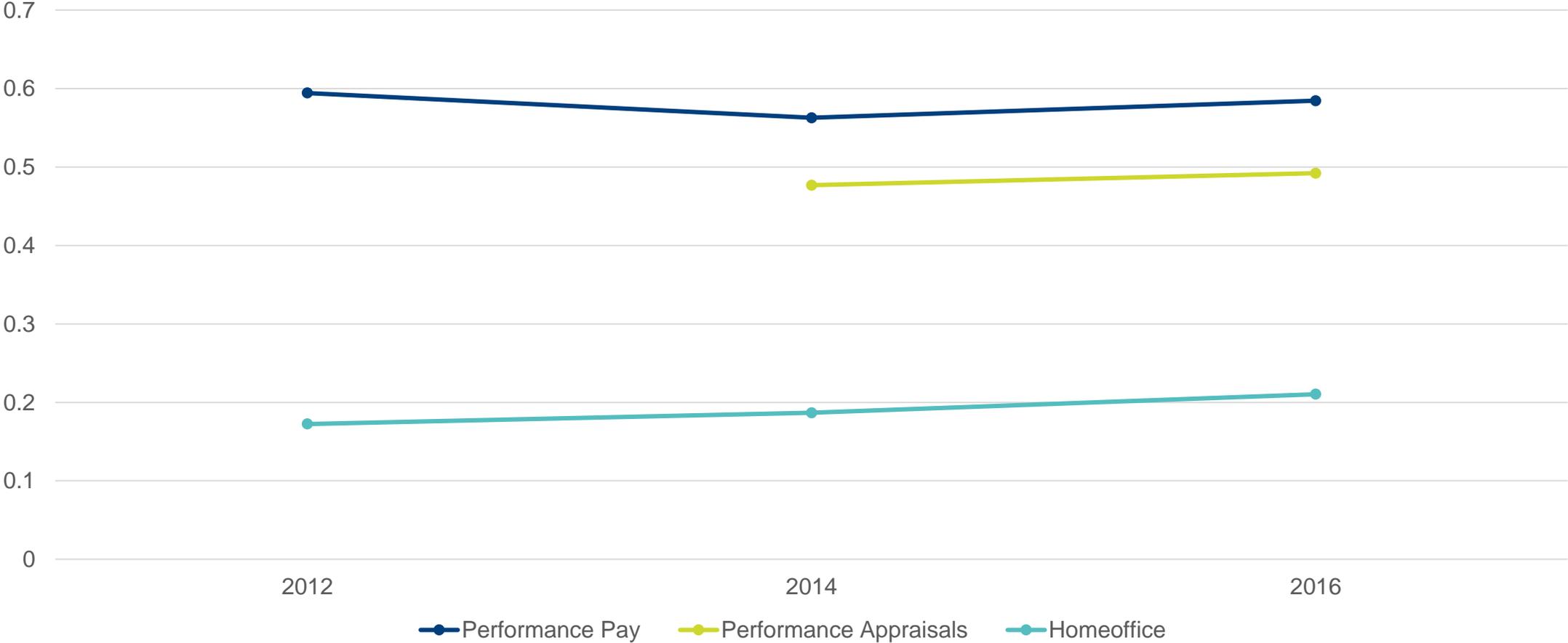
Stefanie Wolter, Stefanie.Wolter@iab.de

BACK UP

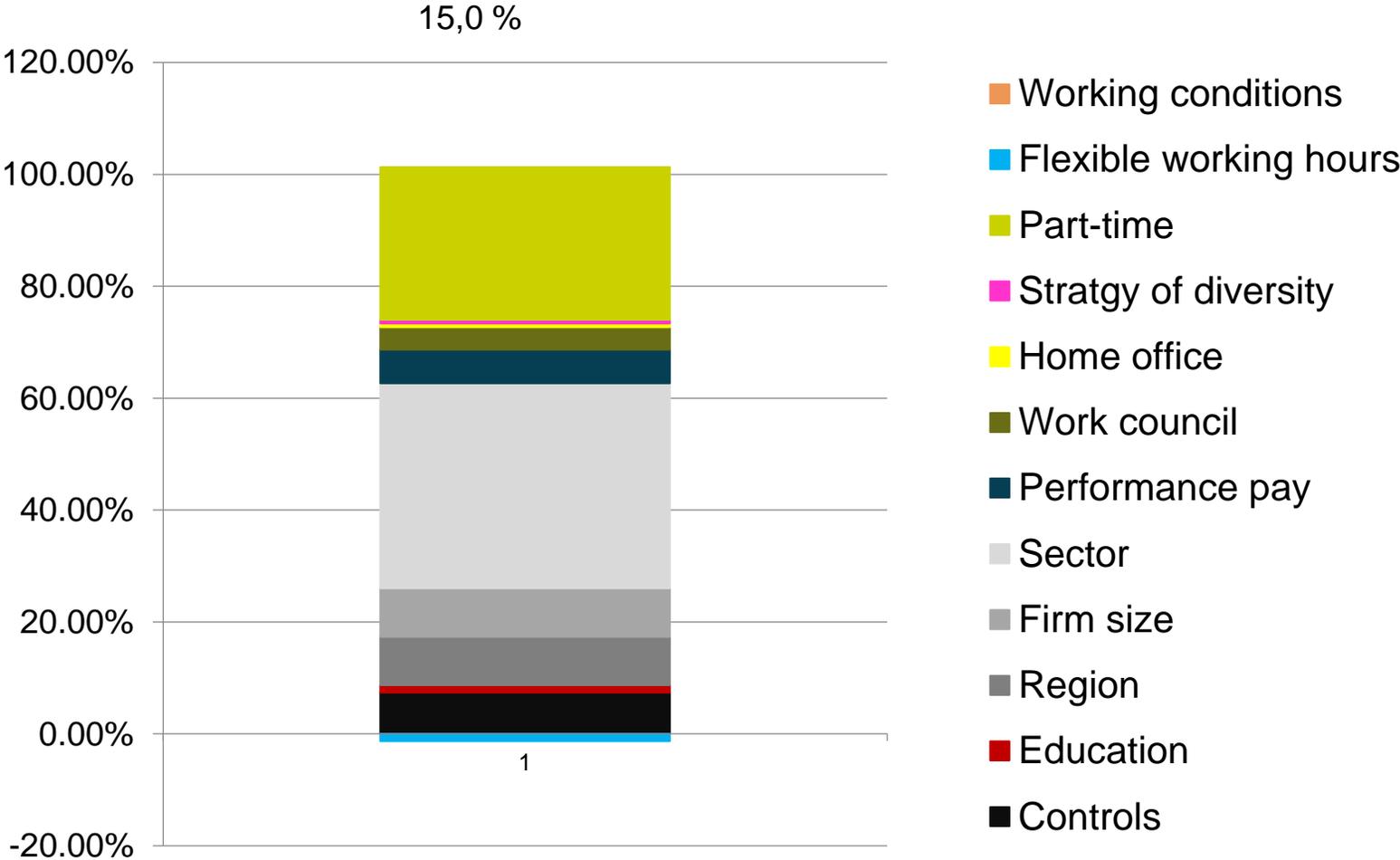
DEVELOPMENT OF ORGANIZATIONAL PRACTICES - ESTABLISHMENTS



DEVELOPMENT OF ORGANIZATIONAL PRACTICES - EMPLOYEES



OAXACA-BLINDER DECOMPOSITIONS: EXPLAINED PART



REASONS FOR THE GENDER WAGE GAP

- Diverse reasons:
 - (Human capital → of minor importance, nowadays)
 - Gender-specific employment histories
 - Occupational sex segregation
 - Different levels of the hierarchy
 - Work volume

- However: The role of the employer and especially of organizational arrangements has been underexplored so far