

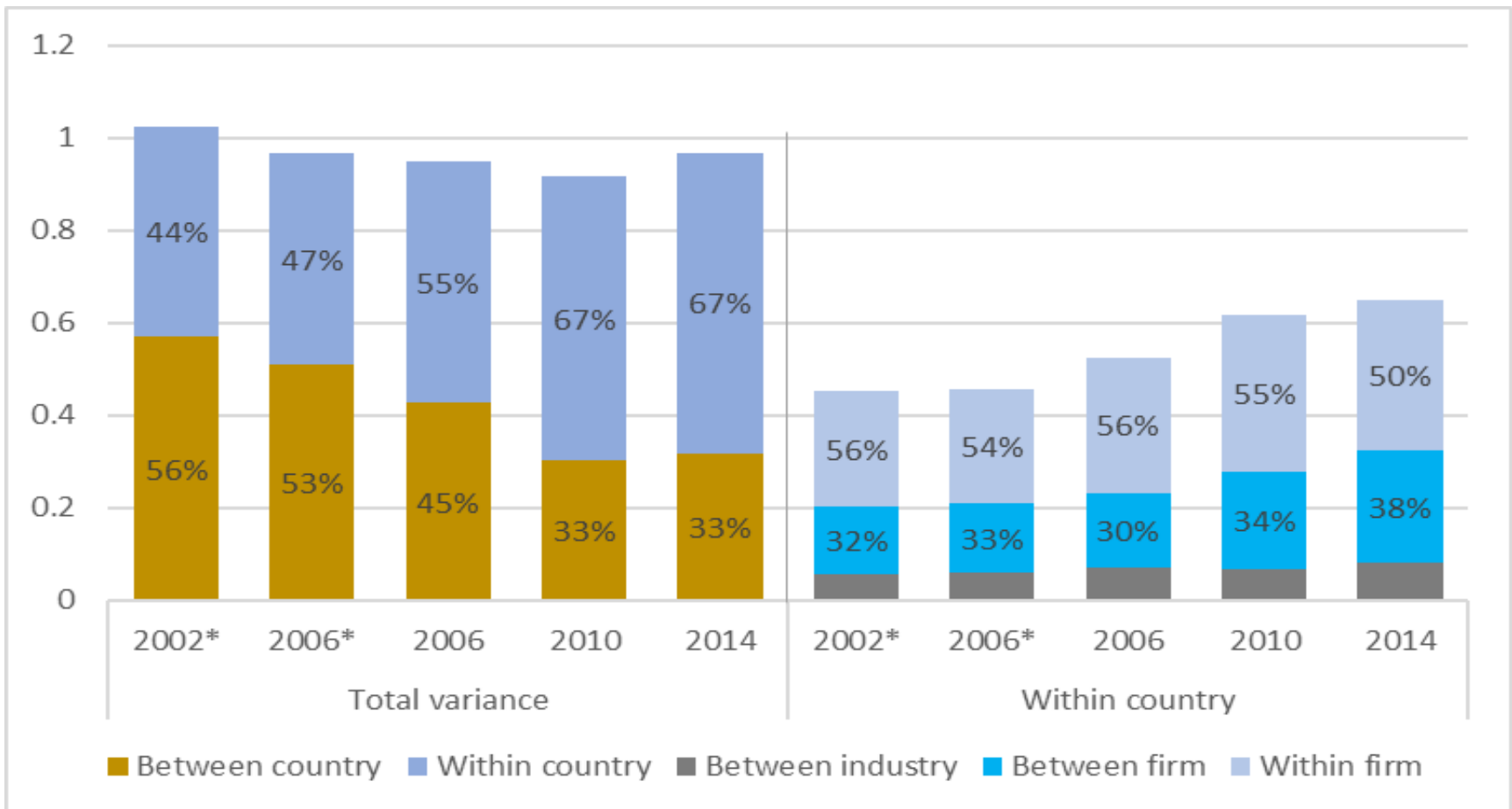
Wage inequality in Europe: The role of pay setting.

Wouter Zwysen, ETUI

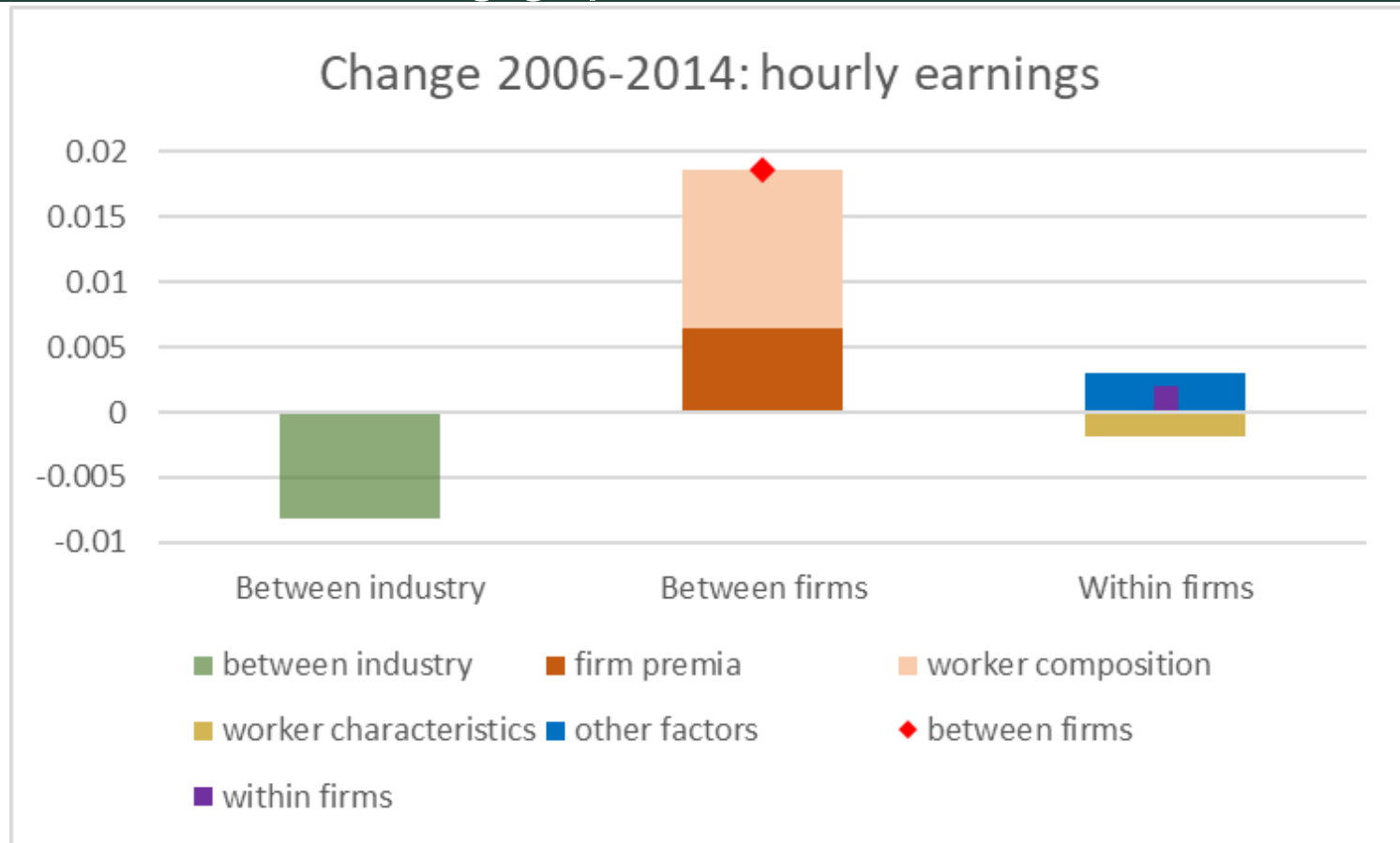
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Introduction

- Earnings inequality increases
- Reflects widening differences in pay between firms



Introduction: widening gaps between firms



Contribution to the change 2006-2014, from a decomposition of log earnings into firm component, socio-demographic and work-related individual characteristics, residual part, and covariances.

Source: SES 2006-2014: weighted by country population

Research question: what is the role of pay setting

Performance pay is increasingly used – differentiates wages and varies more between firms.

- Incentivize worker effort
- Control worker behaviour (principal-actor)
- Increase flexibility in pay
- But costly

Research question: what is the role of pay setting

Performance pay is increasingly used – differentiates wages and varies more between firms.

As it increases pay of more productive workers – inequality increases.

What drives change over time?

- Macro-economic factors
- Institutional factors
- How does representation fit in

How is inequality affected?

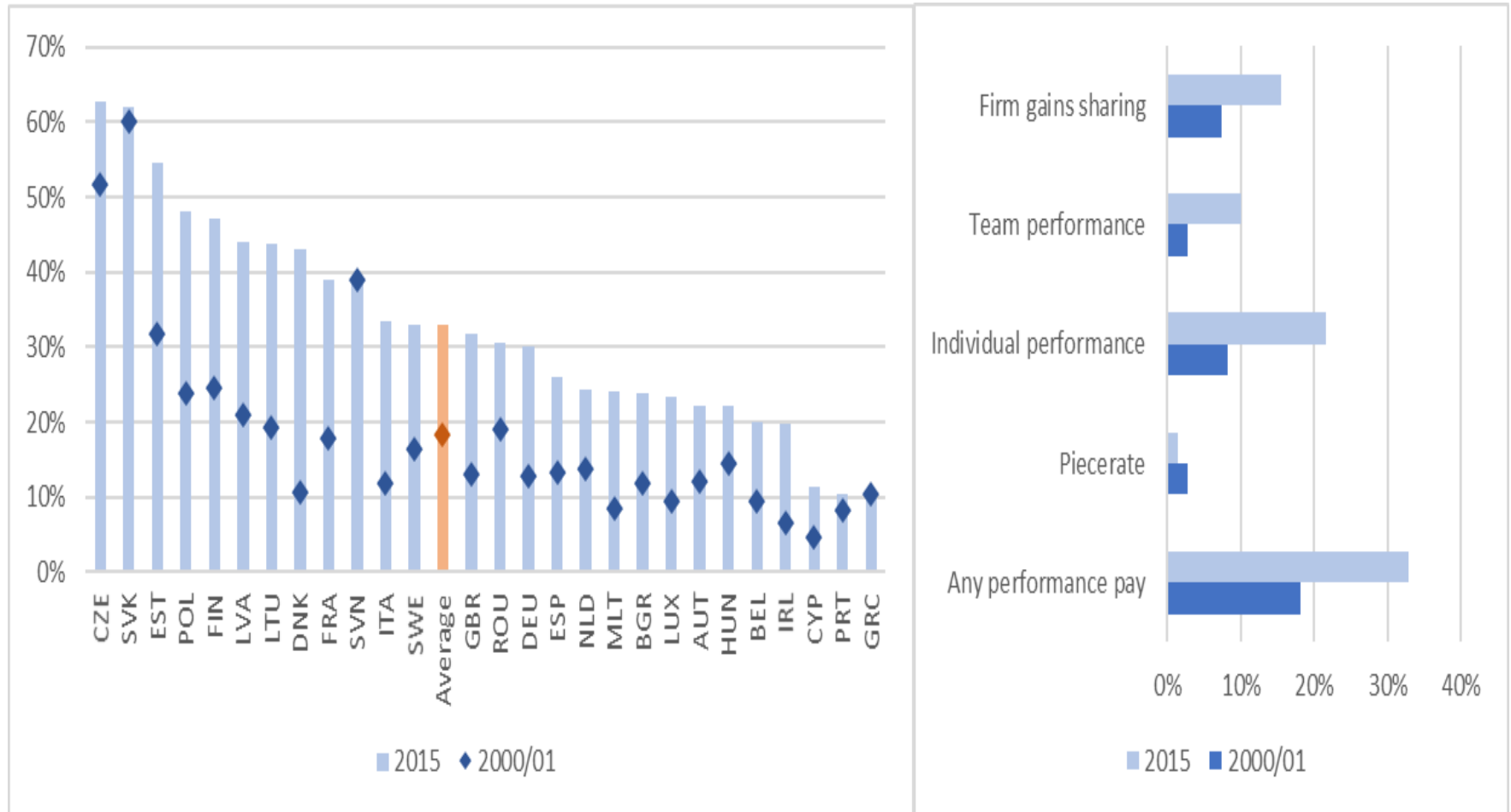
Data: EWCS

- EWCS 2000-2015, employees aged 18-64
 - Do earnings include: a basic salary, bonuses related to productivity or effort (after review), team-based performance; shares, or bonuses related to firm performance)
 - Piece-rate pay, individual performance pay, team performance pay, firm gains sharing
- Robustness: use SES
- Individual level:
 - education, gender, age, migrant status, dependent children, cohabiting,
 - occupation, routineness, abstraction, intensity of manual tasks, firm size, hours of work, temporary contract.
 - Pc-use, exposure to machines
 - Representation

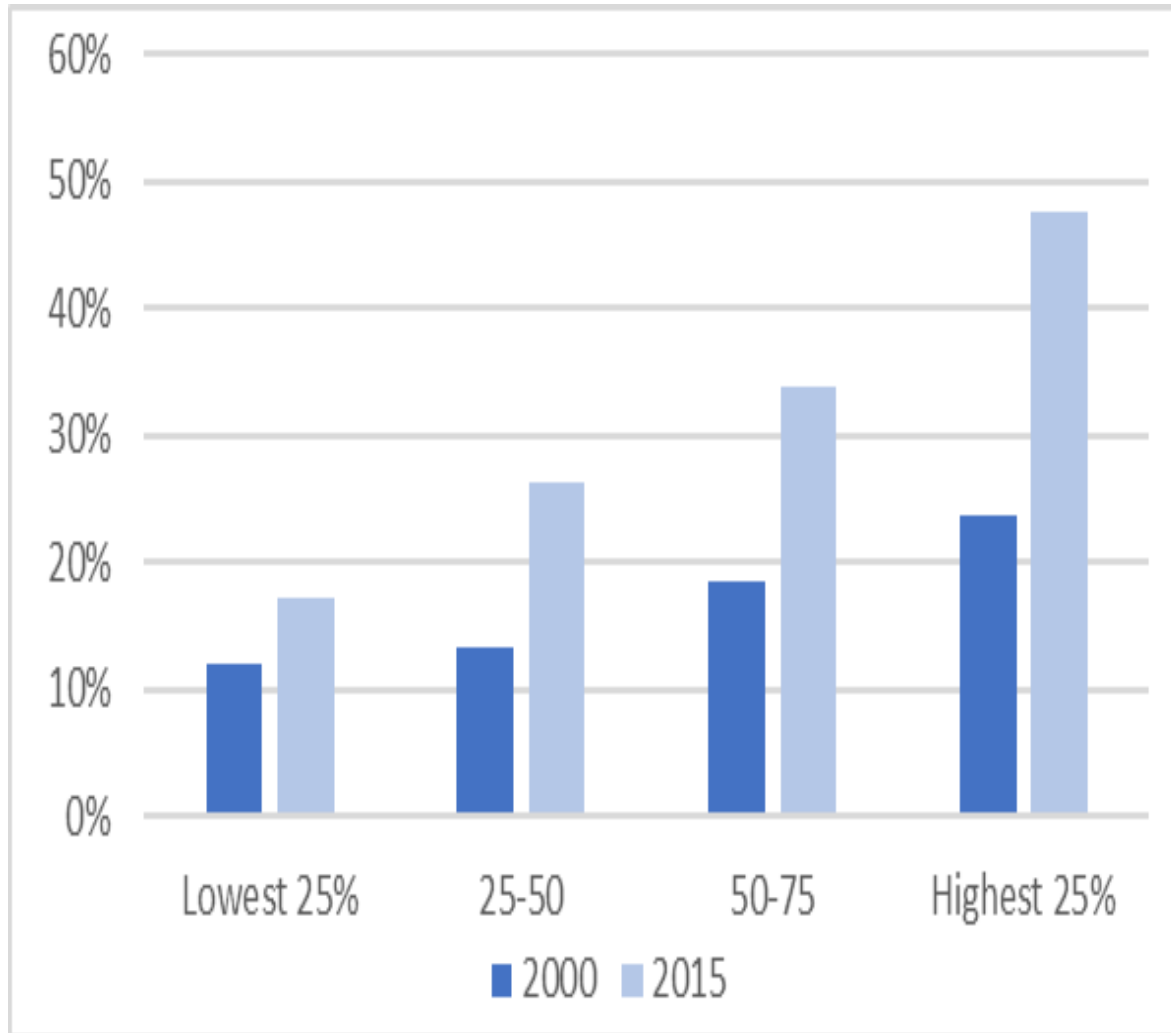
Data: country-sector

- Drivers (Country-year-sector + individual)
 - Technology:
 - aggregate computer use and machines
 - digitalisation indices based on investment and human capital at sectoral level (TiVA, LFS)
 - Trade:
 - trade openness, import ratio (TiVA, world input-output)
 - Worker representation
 - Aggregate access to representative
 - Union density (ICTWSS)
 - Collective pay agreements (SES coverage by cpa)
 - EPL (regular contracts, OECD)

Variation in performance pay

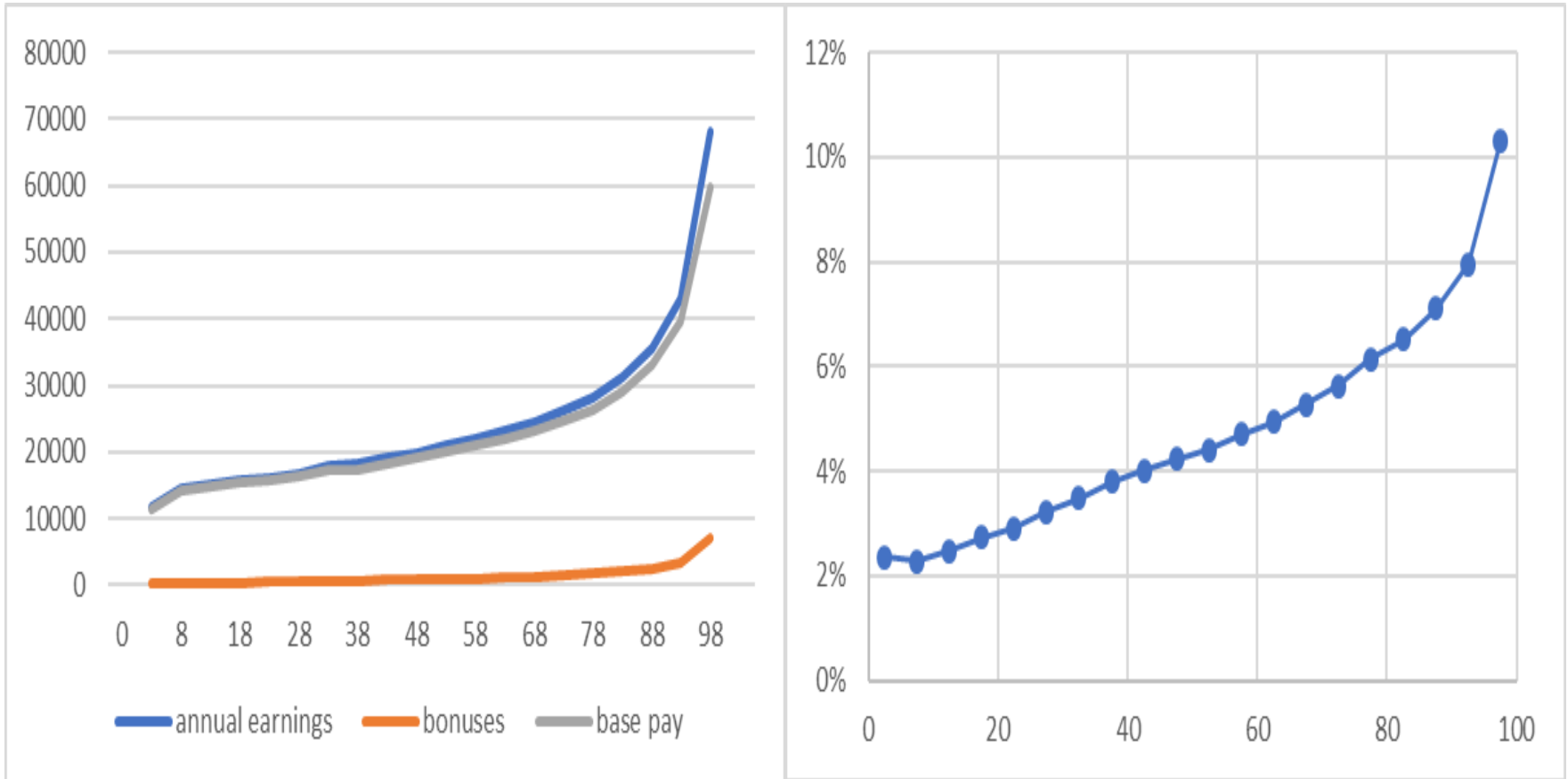


Performance pay most likely at the top



- Performance pay increased mainly at the top of the earnings distribution, with the gap widening over time.
- This inequality is mainly driven by individual performance pay, and by firm gains sharing.
- Piece-rate pay is mainly at the bottom, and team performance pay is quite equally distributed

Bonuses most important at the top

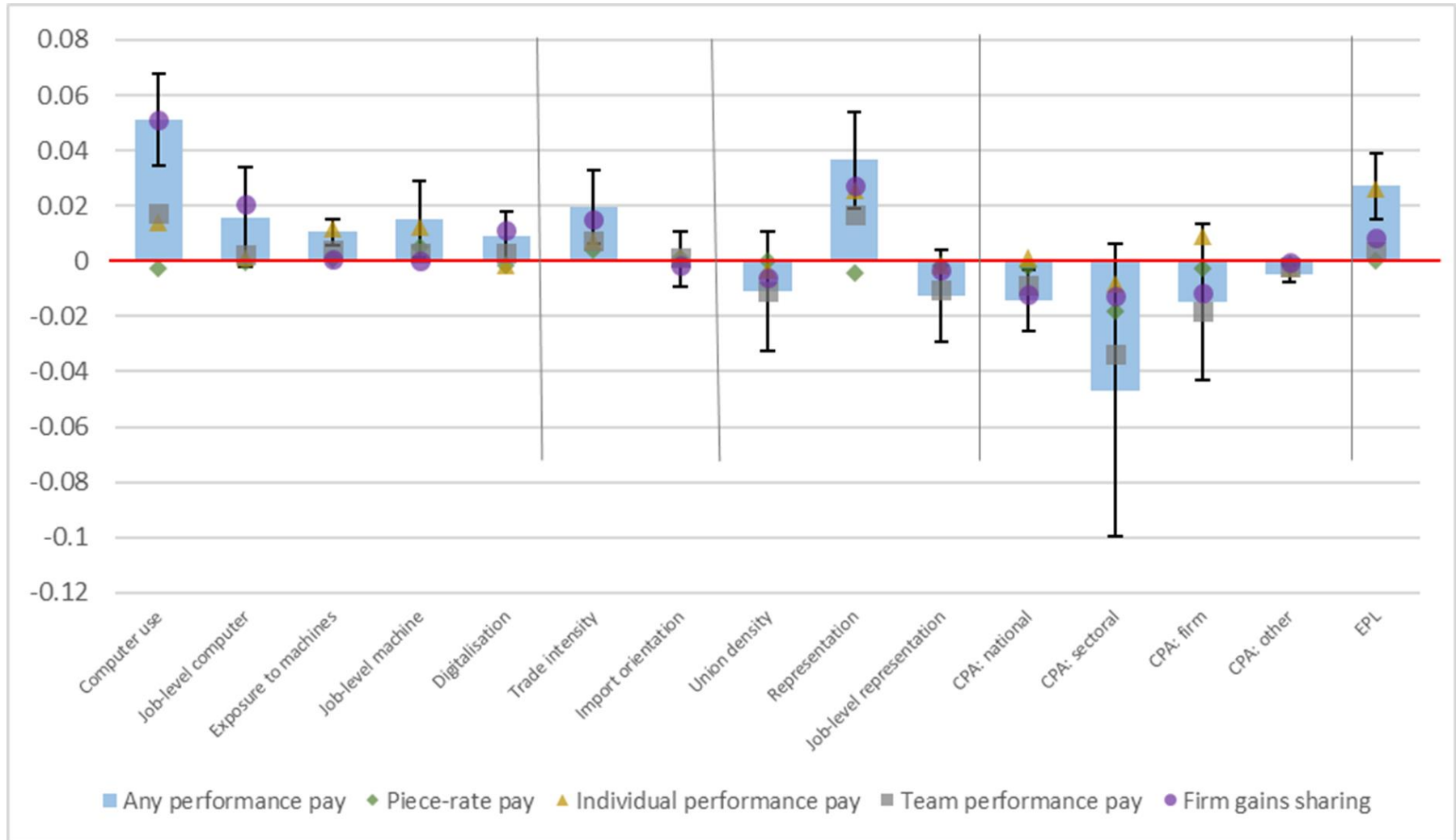


Individual performance pay



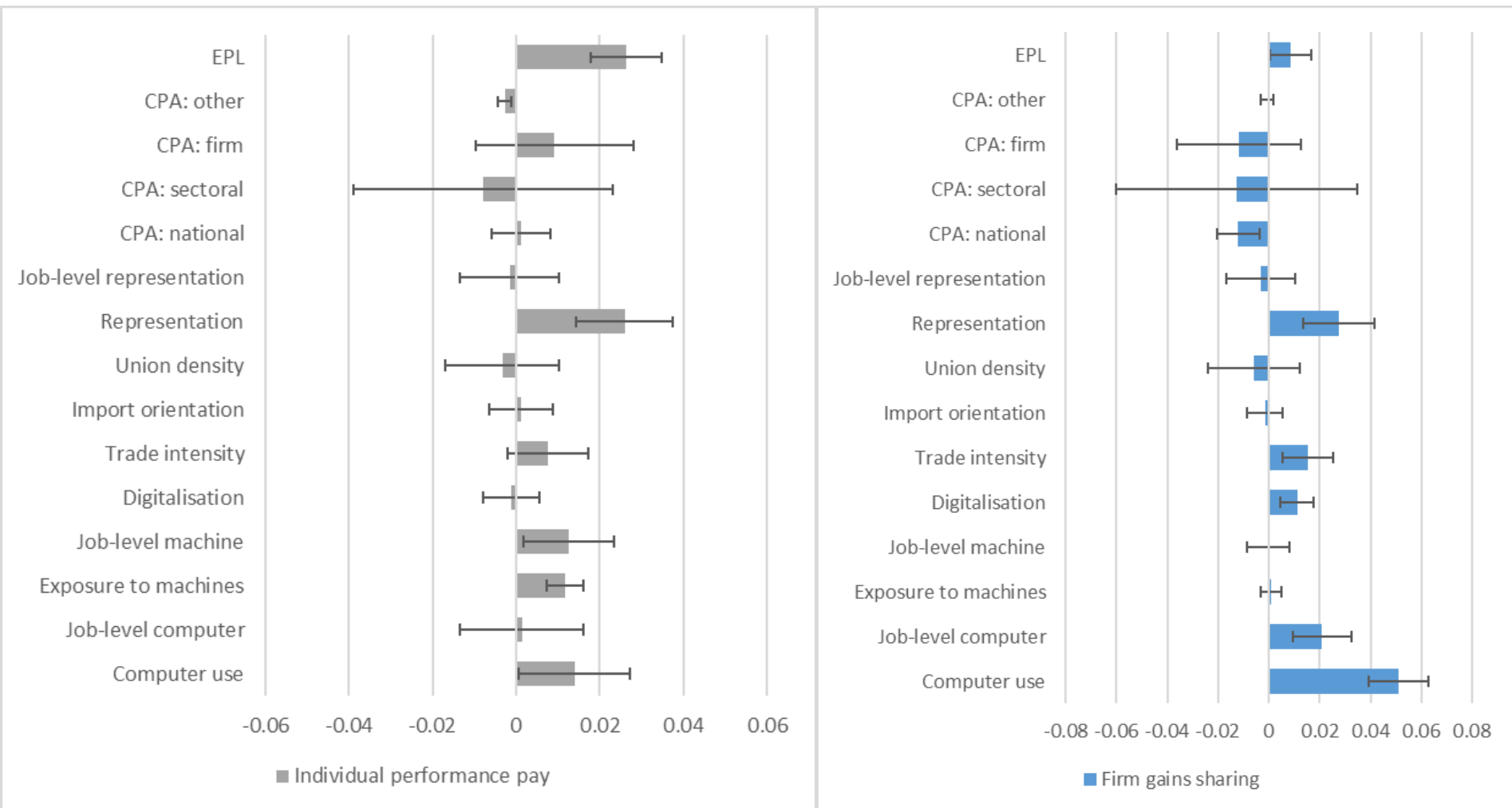
Note: Coefficients and 95% confidence interval from multilevel linear probability model with random coefficient at country-sector-year level, weighted, and controlling for age, gender, gender by age, family situation, occupation, education, type of work.

Contextual factors

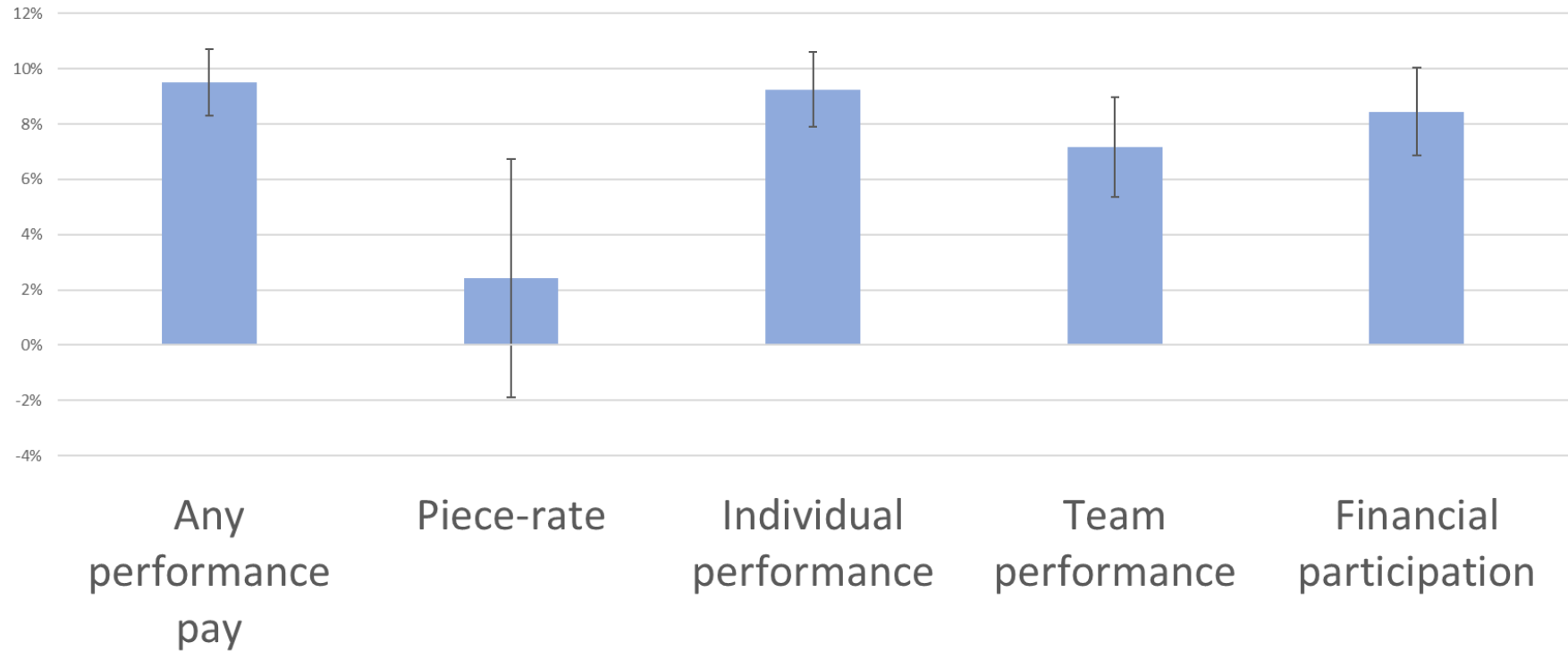


Source: EWCS 2000-2015

Contextual factors on individual PP – firm gains sharing

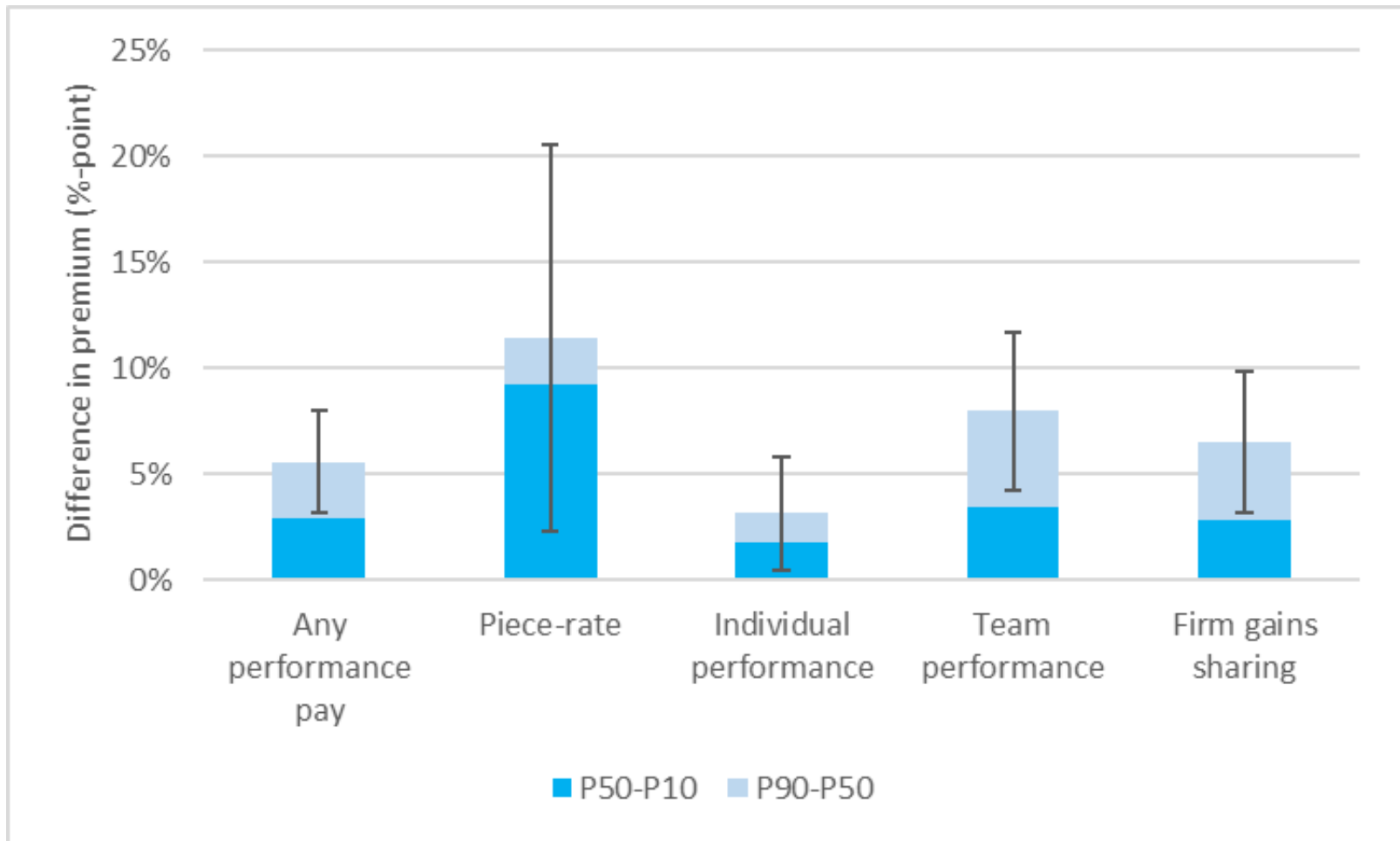


Premium to performance pay



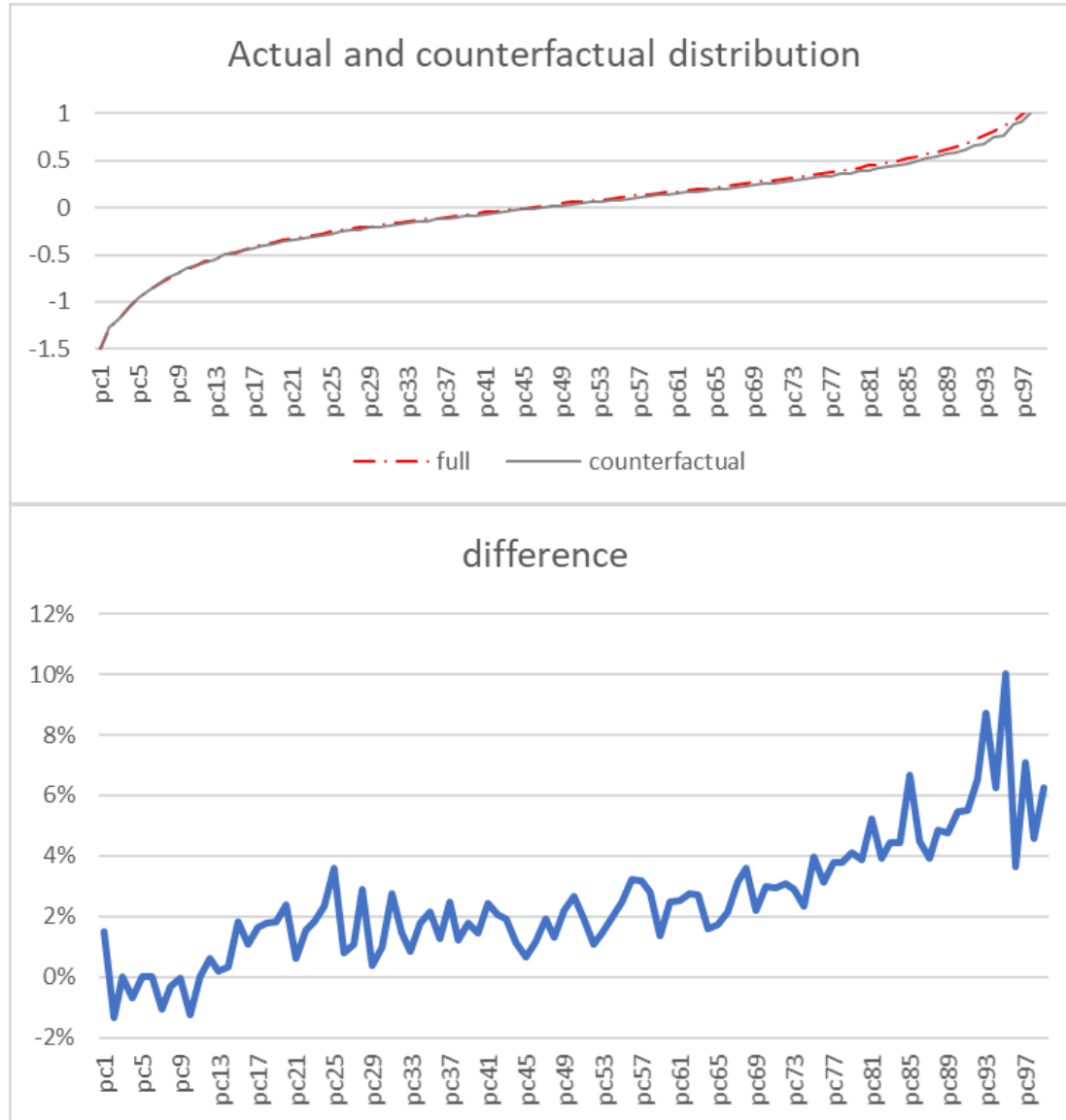
Source: EWCS 2015, controlling for year and sector fixed effects, all individual and work-related controls

Premium higher at the top



Source: EWCS 2015, including fixed effects and all controls. Quantile regression on log monthly earnings

Contribution of performance pay to inequality

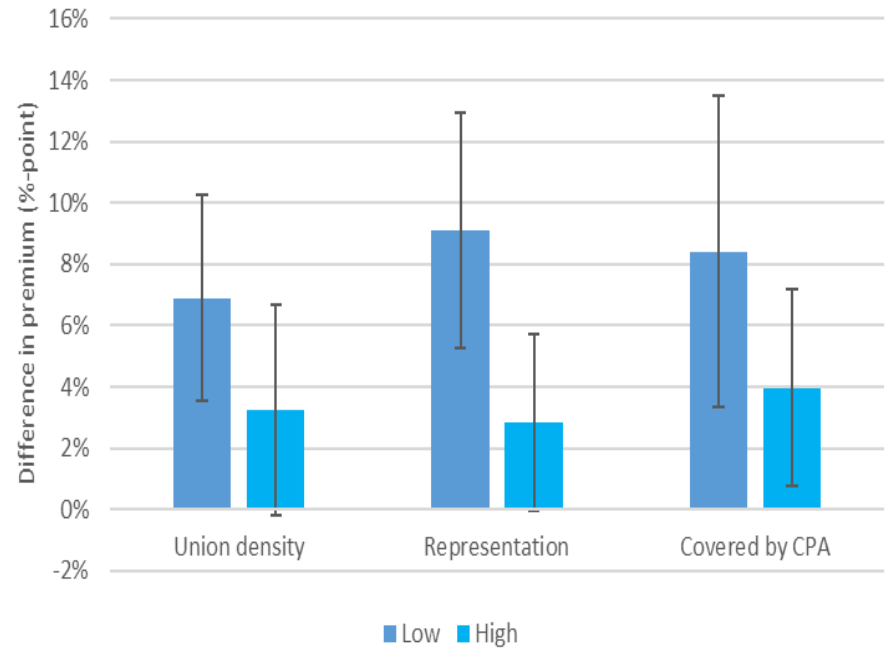
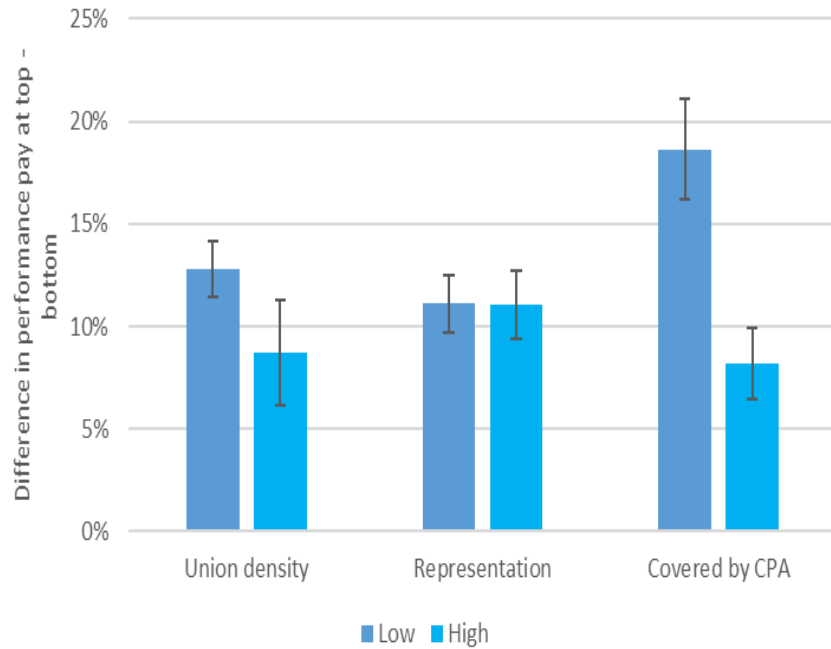


Contribution to wage inequality

	Any performance pay	Piece-rate pay	Individual performance pay	Team performance pay	Firm gains sharing	SES: bonuses
Variance	6.4%	-0.8%	2.1%	2.1%	3.0%	0.2%
p99-p90	1.4%	-5.0%	-3.6%	-4.9%	6.6%	-9.9%
p90-p50	4.8%	3.3%	0.0%	3.6%	3.2%	0.4%
p50-p10	5.6%	-6.9%	0.6%	-1.0%	-0.3%	7.0%
p90-p10	5.2%	-2.3%	0.3%	1.1%	1.3%	3.2%

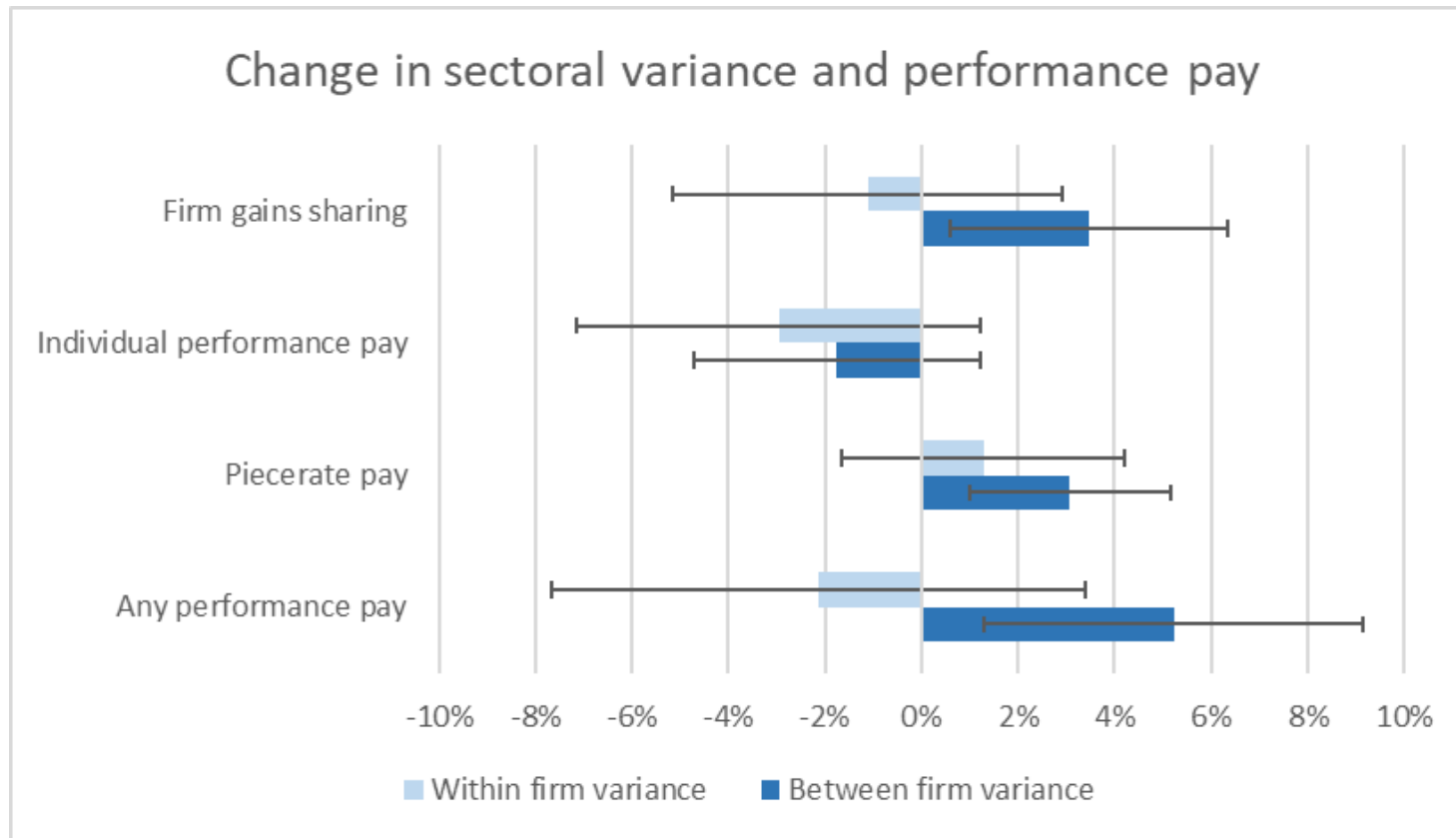
Counterfactual analysis: compare actual distribution to the counterfactual distribution (not receiving performance pay, weighted by inverse of probability of receiving performance pay), following Lemieux et al. 2009.

Representation provides protection against wage inequality



		Variance		P90-P50		P50-P10	
		Actual	Share	Actual	Share	Actual	Share
Workplace representation	No	0.32	10%	0.61	12%	0.78	3%
	Yes	0.23	1%	0.57	6%	0.55	-5%

Link between performance pay and variance



note: effect of changes in between-firm variance and within-firm variance (at country, industry, firm-size, year level: 10% increase), on probability of receiving performance pay. Controlling for year fixed effects and changes in shares of education, occupation, gender, natives, childless, single, temporary contracts, fulltime workers, average age, and hours worked.

Conclusions

- Earnings inequality increasing between but also within firms.
- Performance pay mainly goes to the higher-earning workers and contributes to wage inequality.
- Has increased substantially over time, partly driven by digitalisation, trade openness, and to some extent the decrease in collective pay agreement coverage.
- Institutions matter in reducing the wage inequality