

Gender wage gap in the workplace:

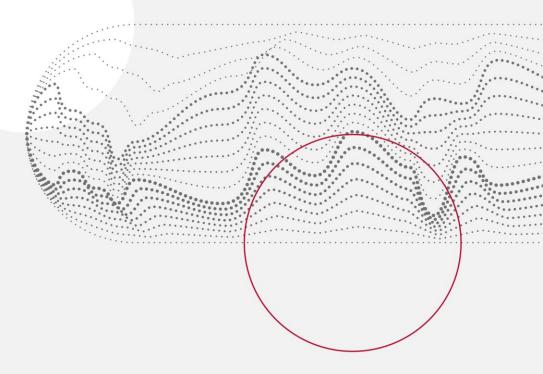
Does the age of the firm matter?

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 Add to the literature on firm-level determinants of gender wage inequalities



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- Do firm-level gender wage gaps depend on the "age" of the firm?
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# THEORETICAL BACKGROUND AND HYPOTHESES

- Start-ups tend to pay lower wages, ceteris paribus. On average, wages in newly founded establishments are 8% lower than in similar incumbent firms (Brixy, Kohaut, Schnabel 2007).
- Firms that have been operating on the labour market for longer tend to pay higher wages (Haltiwanger et al. 1999).

#### THEORETICAL BACKGROUND AND HYPOTHESES

- New businesses exhibit greater heterogeneity in earnings and productivity than mature businesses (Haltiwanger et al 2007) → Greater GWG?
- New businesses in order to stay on the market need to be competitive, and can't afford discrimination (Becker 1967, Black and Brainerd, 2004) → Lower GWG?

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- New businesses exhibit greater heterogeneity in earnings and productivity than mature businesses (Haltiwange et al 2007) → Greater GWG?
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- In transition countries, **old firms** started operating before the market changes, and are likely to carry the legacy of the past (lower wage inequalities) → Lower GWG?
- Old firms have already gained their position in the market, and thus they do
  not need to compete as much as the new firms → Greater GWG?
- Privatized old firms need to remain competitive → Lower GWG than old public firms?

# DATASET AND VARIABLES



# DATASET: 2010 Structure of Earnings Survey

#### KEY VARIABLES

- Hourly wage average gross hourly earnings in a given month
- Firm cohort/age proxied by the maximum tenure of employees (Moriconi et al. 2012)
- Private firms in the oldest cohort (~firms aged 20+) are likely to represent firms that existed before the transition (as public firms) and have been privatized.

FOCUS on 4 post-transition countries (PL, CZ, HU, SK) + comparison with ES, IT, PT, SE

### **METHODOLOGY**



OLS wage regression with female dummy reflecting the unexplained GWG

• 
$$\ln(w)_i = \alpha_0 + \alpha_1 female_i + \sum_k \alpha_k (female_i * firm\_age\_d_{i,k}) + \alpha X + \alpha Z + \varepsilon_i$$

- X Individual level controls:
  - Age, education
  - Tenure, part-time status, occupations, co-workers characteristics (unobserved heterogeneity)
- Z Firm level controls:
  - Firm size; NACE sector, Region
  - Firm age (proxy four groups: 0-3 years, 3-10 years, 10-20 years, and older than 20 years), interacted with female dummy

# RESULTS: descriptive statistics

	CZ	HU	PL	SK	
No of firms	18 046	26 529	17 041	5 799	
No of individuals	1 993 625	835 207	681 702	773 860	
Average size	110	31	40	133	
Distribution of workers across firm cohorts					
Age: 0-3	8%	16%	7%	7%	
Age: 3-10	15%	23%	19%	27%	
Age: 10-20	25%	24%	30%	37%	
Age:>20	52%	37%	44%	28%	
% private sector workers	75%	65%	63%	70%	

# RESULTS: OLS regressions

•	

	CZ	HU	PL	SK
Female	-0,173***	-0,107***	-0,162***	-0,167***
Age10-20 (ref.)				
Female * age0-3	0,177***	0,133***	0,046***	0,108***
Female * age 3-10	0,079***	0,059***	0,059***	0,059***
Female *age 20+	0,004	-0,050***	0,029***	-0,018

Controls: personal (age, education, tenure), job characteristics (occupation, PT, ) firm characteristics (size, NACE), firm's age

# RESULTS: OLS regressions, private sector



	CZ	HU	PL	SK
Female	-0.174***	-0.139***	-0.169***	-0.176***
Female * age0-3	0.191***	0.134***	0.054**	0.100***
Female * age 3-10	0.085***	0.062***	0.071***	0.067***
Female *age 20+	-0.062***	-0.071***	-0.041***	-0.059*

Controls: personal (age, education, tenure), job characteristics (occupation, PT, ) firm characteristics (size, NACE), firm's age

#### ARE CEE COUNTRIES ANY DIFFERENT FROM WESTERN EU?

#### OLS regressions, private sector

	Spain	Italy	Portugal	Sweden
Female	-0.124***	-0.113***	-0.156***	-0.091***
Female * age0-3	0.050***	0.053**	0.089***	-0.003
Female * age 3-10	0.020*	0.025*	0.024	-0.000
Female *age 20+	-0.031***	-0.016	-0.029	-0.014

Controls: personal (age, education, tenure), job characteristics (occupation, PT, ) firm characteristics (size, NACE), firm's age

. 1 :

 Gender pay gaps are visibly lower among employees of younger firms, for all countries



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- In CEE a clear link: GWG increases with firm's age in private firms, but not evident in WE
- The CEE's GWGs highest in companies that were previously state-owned and were privatized during the transition

. 1 :

• Gender pay gaps are visibly lower among employees of younger firms, for all countries – competition theory?

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- Gender pay gaps are visibly lower among employees of younger firms, for all countries – competition theory?
- What could explain higher GWGs in old (in particular privatized firms)? Why
  are they less likely to adopt equal wage policies?
  - More monopsonistic position on the market, lower female labour supply elasticity than men's? (Manning 2003, Hirsch, 2016)
    - -> comparison of churning by gender & firm's age: similar in CEE & SE for firms <20
      years, but in the oldest firms a larger share of women with long tenures in CEE, and of
      men in SE</li>
  - More discriminatory attitudes? Older firms likely to have more traditional view of women's productivity at work



# Thank you!

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