

Overtime and Wage Adequacy in the European Union: Evidence from Survey Data and Collective Agreements

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Problem and Question

- ▶ **Adequate wages:** pay that is sufficient to meet a worker's basic needs and ensure a decent standard of living.
- ▶ Are **non-standard hours** relevant to reach adequate wages for many workers? Depends on...
 - ▶ Incidence of paid and unpaid non-standard hours.
 - ▶ Non-standard premiums.
 - ▶ Association between paid and unpaid non-standard hours and non-standard premiums.
 - ▶ Low-wage workers doing paid non-standard hours.
- ▶ **This paper:** focus answers these questions combining SES and LFS with new data on collective agreements (CA) from all EU countries.
 - ▶ **Focus on overtime** hours.

Data Summary

- ▶ Structure of Earnings Survey.
 - ▶ Earnings, hours worked, paid overtime, etc.
- ▶ Labor Force Survey.
 - ▶ Hours worked, paid and unpaid overtime, etc.
- ▶ Collective Agreement database.
 - ▶ Very exhaustive. We focus on non-standard hour premiums.
 - ▶ Collected by WageIndicator Foundation.

Summary of Results

- ▶ Overtime work does not help many workers reach adequate wages.
- ▶ This is true despite overtime premiums around 20%.
- ▶ However:
 - ▶ Low incidence of paid overtime hours.
 - ▶ Workers doing overtime are around the median wage, not the adequate wage.
 - ▶ No positive association between overtime hours and overtime in CAs.
 - ▶ If unpaid overtime was paid, not large gains.

Talk Outline

Does Overtime Help Workers Get Adequate Wages?

Why Overtime Does Not Raise Wages to Adequacy?

Are Overtime Hours Rewarded with Premiums?

Low Incidence of Overtime Hours?

What if Unpaid Overtime Hours Were Paid?

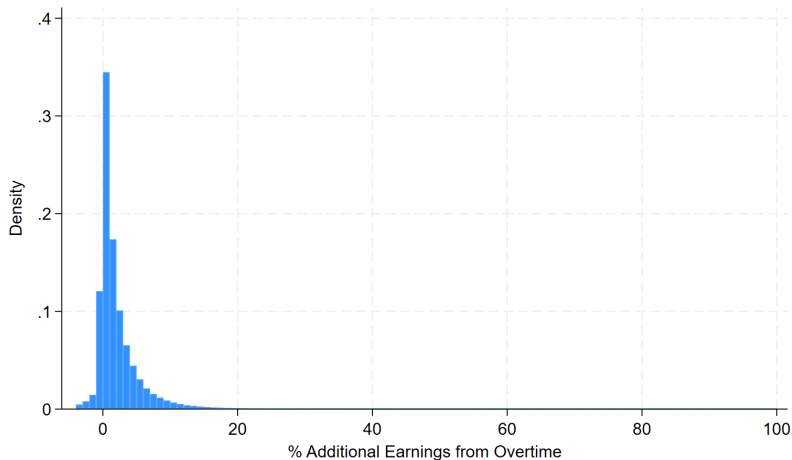
Are Premiums Negotiated where Workers Do Non-Standard Hours?

Conclusions

Does Overtime Help Workers Get Adequate Wages?

- ▶ From SES data we know standard hour pay and overtime hour pay.
- ▶ We do the following exercise:
 - ▶ Calculate the wage they would have received if standard and overtime pay had been =.
 - ▶ Then, we calculate the earnings differential that overtime pay implies.

% Earnings from Overtime



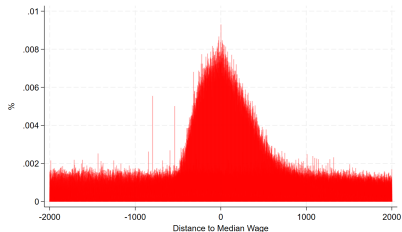
► Low earnings incidence:

- 2.4% average increase in earnings due to overtime.
- 3% overtime workers with earnings increase $> 10\%$.

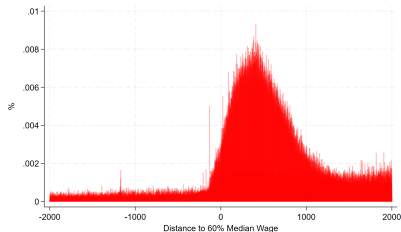
How Many Workers above Adequate Wage with Overtime?

- ▶ 0.46% are lifted above 60% of the median wage.
- ▶ 0.4% are lifted above 50% of the mean wage.
- ▶ 2.2% are lifted above the median wage.
- ▶ 2.3% are lifted above the mean wage.
- ▶ Results suggest workers doing non-standard hours are not at the bottom of the distribution. We confirm that in the next slide.

How Many Workers above Adequate Wage with Overtime?



Distance to Median



Distance to Adequate Wage (60% Median)

- ▶ Most workers doing overtime are around the median wage, not at the bottom of the wage distribution.

Why Overtime Does Not Raise Wages to Adequacy?

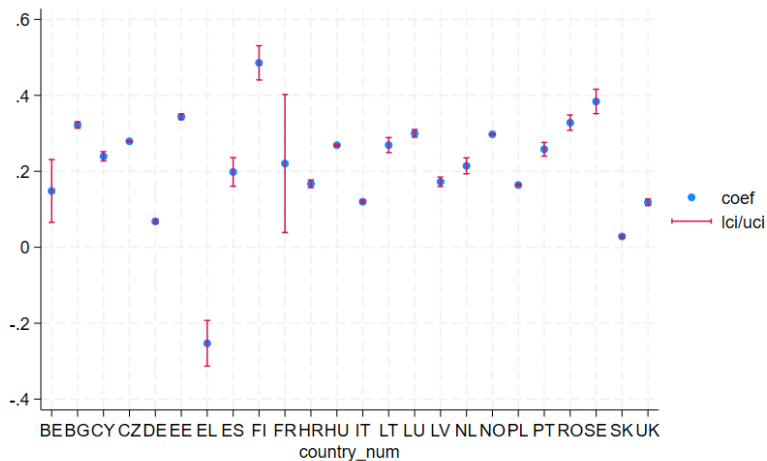
- ▶ Results suggest few workers reach adequate wages with overtime hours?
- ▶ Why?
 - ▶ Are overtime hours rewarded with premiums?
 - ▶ Low incidence of paid overtime hours?
 - ▶ High incidence of unpaid overtime? What if they were paid?
 - ▶ Are premiums negotiated where workers do non-standard hours?

Are Overtime Hours Rewarded with Premiums?

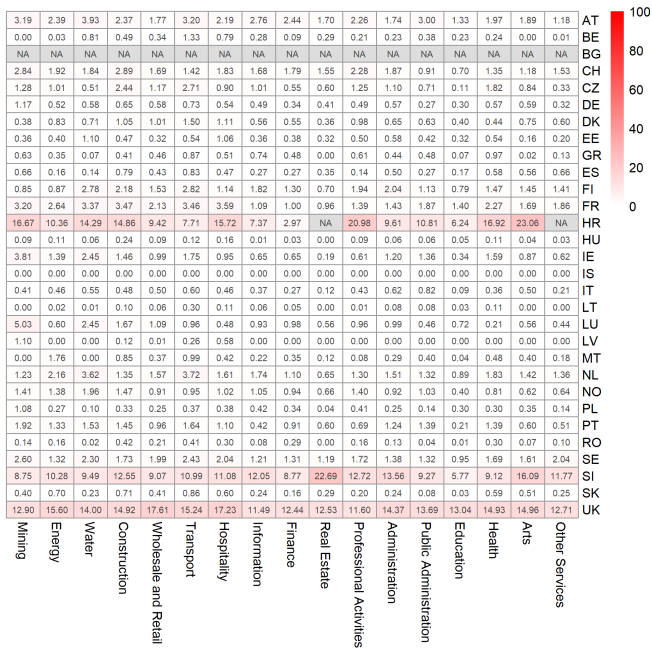
$$\log w_{isl} = \alpha + \delta_s + \delta_l + \beta Overtime_{isl} + \rho X_{isl} + \epsilon_{isl} \quad (1)$$

- ▶ $\log w_{isl}$: log of the full-time equivalent hourly wage for individual i in sector s and location l .
- ▶ δ_s and δ_l are sector and location fixed effects.
- ▶ $Overtime_{isl}$ is a dummy that indicates if the payment was related to overtime hours or not.
- ▶ X_{isl} is a vector of controls such as gender, education level, type of contract, occupation, a quadratic polynomial for tenure, and cba coverage.

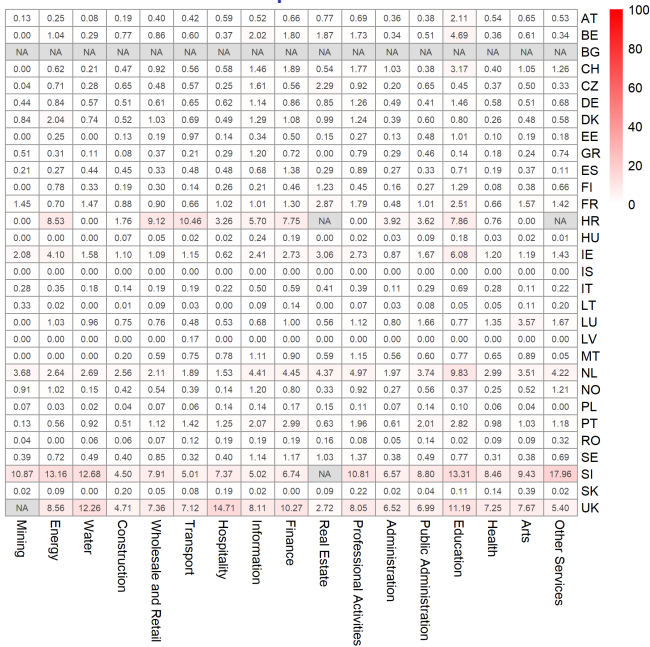
Are Overtime Hours Rewarded with Premiums?



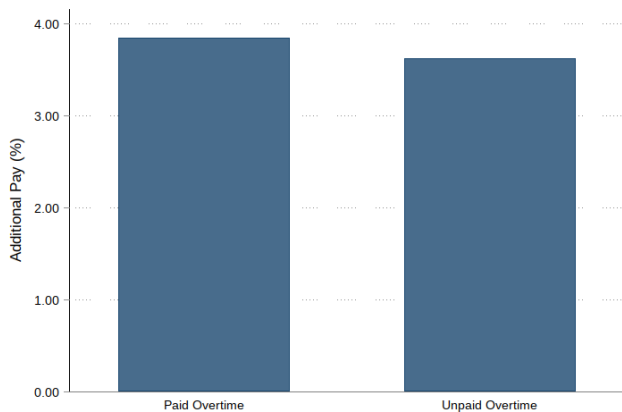
Low Incidence of Paid Overtime Hours?



High Incidence of Unpaid Overtime Hours?



What if Unpaid Overtime Hours Were Paid?



Are Premiums Negotiated where Workers Do Non-Standard Hours?

$$Y_{sc} = \alpha + \delta_c + \delta_s + \beta X_{sc} + \epsilon_{sc} \quad (2)$$

- ▶ Y_{sc} is the % of CAs that have premiums for a non-standard hours (overtime, night, etc.)
- ▶ X_{sc} is the % of workers that do non-standard hours (overtime, night, etc.)

Are Premiums Negotiated where Workers Do Non-Standard Hours?

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
	% CBA Overtime	% CBA Overtime	% CBA Overtime	% CBA Overtime	% CBA Overtime	% CBA Overtime	% CBA Overtime	% CBA Overtime	% CBA Overtime	% CBA Holidays	% CBA Holidays
% Workers Overtime (SES)	0.473*** (0.067)										
% Workers Paid Overtime (LFS)		1.234*** (0.241)									
% Workers Overtime (LFS)			0.701*** (0.215)								
% Workers Unpaid Overtime (LFS)				-0.337 (0.244)							-0.671*** (0.254)
% Hours Overtime (SES)					3.378*** (0.573)						
% Hours Paid Overtime (LFS)						0.772 (0.488)					
% Hours Overtime (LFS)							0.044 (0.522)				
% Hours Unpaid Overtime (LFS)								-2.058*** (0.530)			-0.595 (0.848)
% Earnings Overtime (SES)									2.876*** (0.447)		
Observations	3626	3626	3626	3626	3626	3470	3457	3457	3626	935	917

Standard errors in parentheses
* p < 0.10, ** p < 0.05, *** p < 0.01

- Incidence of overtime hours not associated with CAs with overtime (columns 6-8).

Conclusions

- ▶ Overtime hours aren't very relevant to raise wages to adequacy level:
- ▶ True despite overtime premiums around 20%.
- ▶ Why?
 - ▶ Low incidence of paid and unpaid overtime hours.
 - ▶ Workers doing overtime are around the median, not around the adequacy level.
 - ▶ There is no positive association between overtime hours and overtime in CAs.