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Unveiling the Public Sector Wage Premium in Kosovo: Insights from a Re-Weighted Decomposition Approach

- **Albian Krasniqi*, Barry Reilly** and Venera Demukaj*****

*Technological University of Dublin

**University of Sussex

***Rochester Institute of Technology

Background and Motivation

- Kosovo, located in the Western Balkans, is home to 1.8 million people and declared independence in 2008.
- Before 1999, Kosovo was part of the former Yugoslavia.
- After declaring independence, the new government increased public sector wages by 50% leading up to the national elections.
- From 2011 to 2016, net public sector wages rose by €100, whereas private sector wages increased by just €2.

Background and Motivation (2)

Indicator	Year	Albania		Bosnia & Hercegovina	Kosovo		North Macedonia		Montenegro		Serbia	
Employment rate	2023	57.2		41.5	35.4		45.4		55.6		50.3	
Unemployment rate	2023	10.7		13.2	8.8		13.1		13.1		9.4	
Youth unemployment rate	2023	25.7		29.9	16.9		29.4		23.7		25.1	
Employment share of public sector	2018	14.2		29.2	30.8		22.8		30.4		25.8	
Wage bill - per cent of GDP	2022	4.0		10.3	7.3		6.5		10.5		9.6	
Average real wage growth	2015-2023	2.3		2.41	0.80		0.18		3.03		2.89	
Average productivity growth	2015-2023	-0.42		-0.14	1.27		-0.24		2.34		1.16	
Average monthly gross wage(€)	2018	397		724	558		766		579		580	
Average salaries in public sector(€)	2022	720		1,175	604		793		916		924	
		men	women	total	men	women	men	women	men	women	men	women
Unadjusted public sector pay premium (log points)	2008-2011	0.15	0.30	0.55	†	†	0.32	0.46	0.02	0.17	0.34	0.42
Adjusted public sector pay premium (log points)	2008-2011	0.043	0.044	†	†	†	0.129	0.164	-0.011	0.062	0.147	0.204

Outline:

- Literature review
- Data and summary statistics
- Methodology: Unconditional quantile regressions and Re-weighted decomposition approach
- Empirical results
- Conclusion and policy implications

Literature review

- Empirical studies in the EU indicate a public sector wage premium:
  - Germany (Melly, 2005)
  - Greece (Papaetrou, 2006)
  - Portugal (Campos & Pereira, 2009)
  - Italy, France, and the UK (Lucifora & Meurs, 2006)

- According to the Irish CSO 2022 report:
  - Public sector workers earned 3.3% more at the median than private sector workers.
  - At the 90th percentile, private sector workers outearned public sector workers by 11.9%.
- Transition economies:
  - An initial pay gap favouring private sector workers, e.g., Serbia (Krstic, Litchfield and Reilly(2007)).
  - A later convergence to a public sector wage premium (Vladisavljevic et al., 2017).

- After the fall of communism, first-time job-takers in the private sector were found to earn a pay premium (Lausev, 2014).

Data description

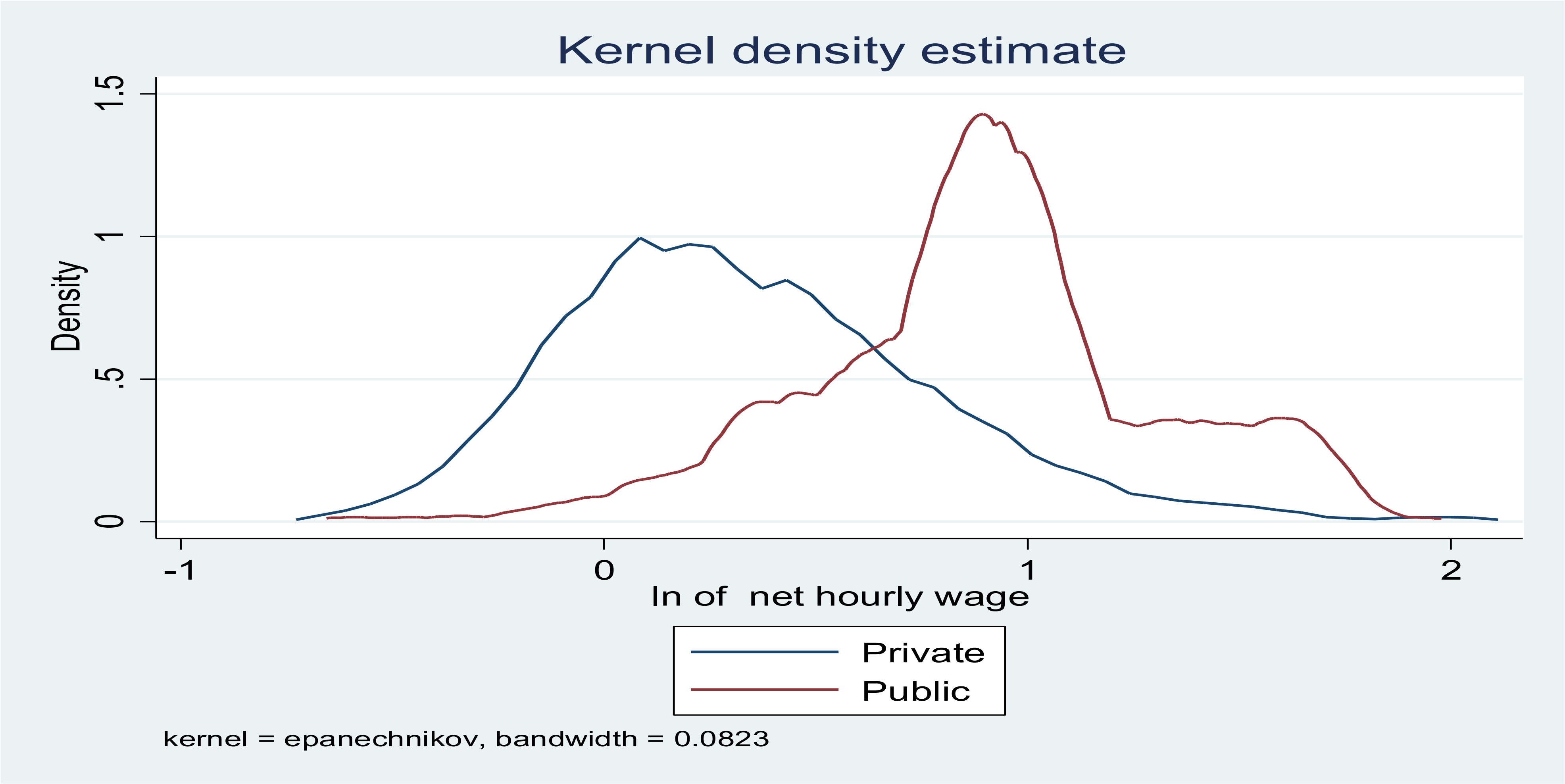
Table 2: Variable definition and summary statistics

Variable	Description	All	Public sector	Private sector
Private	= 1 if private sector = 0 otherwise;	.506		
Public	= 1 if public sector = 0 otherwise;	.494		
lnwage	The natural logarithm of the hourly wage;	.612	.887	.344
Monthly wage	Monthly salary in net Euros	367.04	415.078	320.172
Working hours	Usual weekly working hours	44.223	38.626	49.683
Female	= 1 if female = 0 otherwise;	.302	.345	.26
Married	= 1 if married = 0 otherwise;	.764	.869	.663
Age	The number of years;	40.994	46.256	35.86
Age squared	The number of years squared;	1835.26	2267.696	1413.358
Albanian	= 1 if Albanian = 0 otherwise;	.936	.892	.979
Primary	=1 if completed primary education or less; = 0 otherwise	.01	.009	.01
Secondary	= 1 if completed secondary education = 0 otherwise;	.243	.145	.34
Vocational	= 1 if completed vocation education = 0 otherwise;	.424	.366	.48
Tertiary	= 1 if completed tertiary education = 0 otherwise;	.258	.379	.139
PhD	= 1 if completed a postgraduate or PhD education = 0 otherwise;	.066	.101	.031
Tenure	The number of years worked in the current job;	11.399	16.633	6.292
Tenure squared	The number of years squared worked in the current job;	244.827	408.716	84.931
Manager	= 1 if manager = 0 otherwise;	.056	.034	.078
Professionals	= 1 if professional occupations = 0 otherwise;	.275	.489	.067
Services	= 1 if service or sales worker = 0 otherwise;	.148	.035	.257
Craft	= 1 if craft worker = 0 otherwise	.075	.031	.118
Elementary	= 1 if elementary worker = 0 otherwise;	.145	.103	.187
Technician	= 1 if technician worker = 0 otherwise;	.048	.07	.026
Clerical	= 1 if cleric worker = 0 otherwise;	.08	.097	.065
Agricultural	= 1 if agriculture worker = 0 otherwise;	.004	.003	.004
Machine	= 1 if machine operator worker = 0 otherwise;	.021	.007	.036
Other	= 1 if other worker = 0 otherwise;	.147	.131	.163
Prishtina	= 1 if works in capital city= 0 otherwise	.181	.174	.188
Observations	The number of observations	3082	1522	1560

Source: LFTUS, 2017

- Labour Force and Time Use Survey conducted in 2017, with 8,533 households
- We exclude unpaid workers, potential outliers, armed forces and informal sector workers
- Significant differences were noted in various characteristics, such as working hours, education and tenure

Kernel Densities of Private and Public Sector Workers



Empirical strategy

- We specify log of hourly net wages specification using Mincer’s (1974) augmented approach.

- We estimate the public sector pay premium across the unconditional pay distribution using the Oaxaca (1973) and Blinder (1973) approach using Firpo et al. (2009) unconditional quantile regression functions.

- We then apply the Firpo et al. (2018) re-weighting procedure.

- Firpo et al. (2018) approach ensures the wage treatment differential reflects only the differences in wage prices across the two sub-samples and is not affected by the difference in the distribution of observable characteristics between the two samples.

Results: earning determinants

- Pooled regression estimates indicate a public sector pay premium across the entire earnings distribution.
- The estimates for most other covariates in the model yield expected results consistent with previous regional research.

Table 3: Earnings determinants from the pooled model

VARIABLES	Mean	10th	25th	50th	75th	90th
public	0.274***	0.304***	0.336***	0.317***	0.201***	0.236***
	(0.018)	(0.038)	(0.026)	(0.020)	(0.027)	(0.040)
female	-0.069***	-0.054**	-0.056***	-0.088***	-0.105***	-0.027
	(0.015)	(0.025)	(0.020)	(0.017)	(0.021)	(0.035)
married	0.065***	0.078**	0.079***	0.071***	0.052*	0.056
	(0.020)	(0.035)	(0.027)	(0.024)	(0.030)	(0.046)

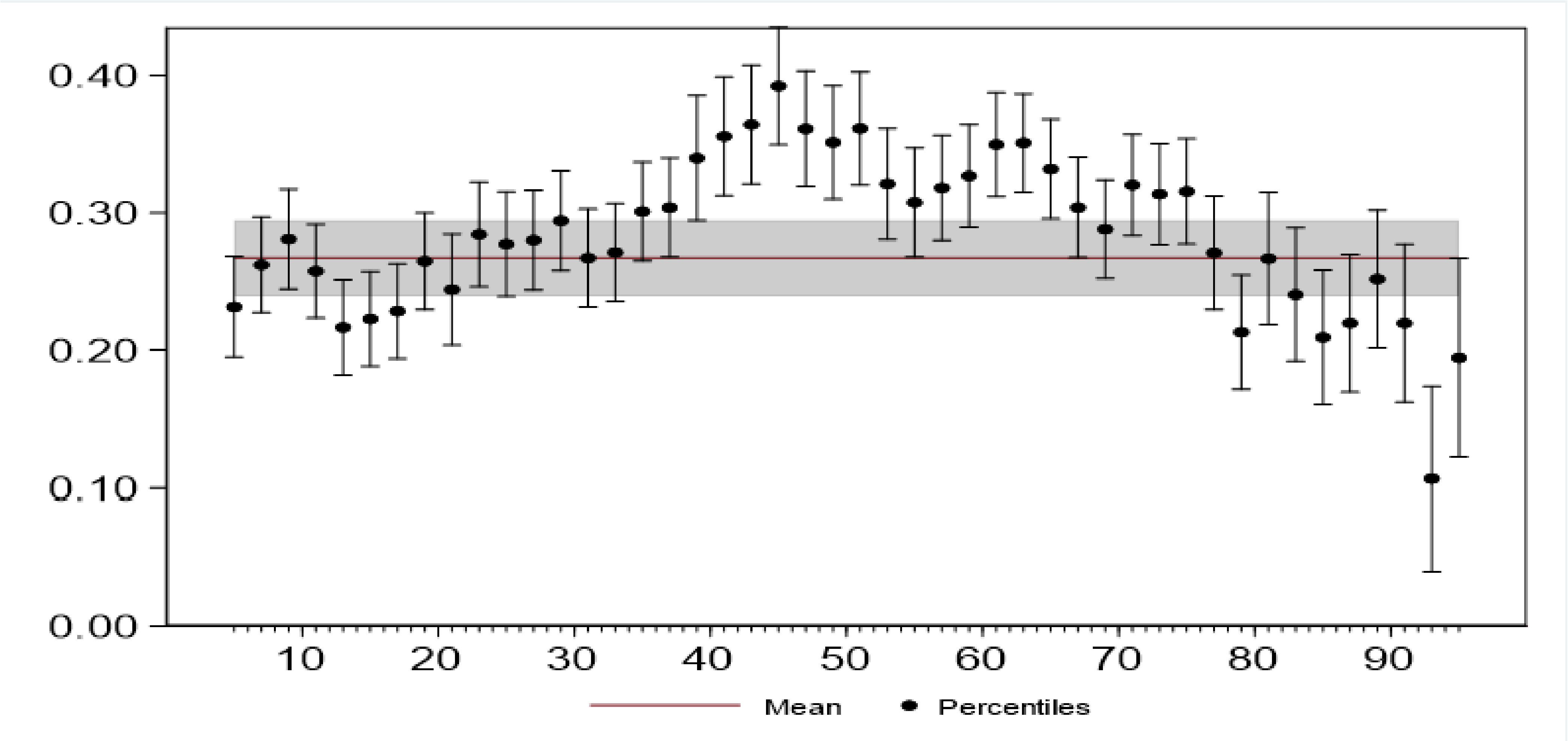
Log pay differentials by sector using
(i) standard Oaxaca-Blinder unweighted decomposition

(ii) and Firpo et al (2018) re-weighted decomposition

- The model assumes that public worker wage structure prevails in the absence of unequal treatment
- The re-weighted endowment effect increases slightly in each percentile
- The highest pure unexplained treatment gap is found to be around the median wage positions

VARIABLES	Mean	10th	25th	50th	75th	90th
Raw differential	0.543***	0.537***	0.616***	0.584***	0.459***	0.587***
	(0.015)	(0.022)	(0.021)	(0.017)	(0.020)	(0.030)
Treatment (unweighted)	0.303***	0.281***	0.350***	0.271***	0.169***	0.354***
	(0.015)	(0.020)	(0.022)	(0.018)	(0.017)	(0.028)
Endowment (unweighted)	0.240***	0.256***	0.266***	0.313***	0.289***	0.234***
	(0.015)	(0.017)	(0.019)	(0.021)	(0.020)	(0.026)
Treatment (re-weighted)	0.247***	0.317***	0.362***	0.208***	0.135***	0.247***
	(0.022)	(0.037)	(0.035)	(0.020)	(0.026)	(0.050)
Endowment (re-weighted)	0.267***	0.257***	0.277***	0.351***	0.315***	0.244***
	(0.014)	(0.017)	(0.019)	(0.021)	(0.020)	(0.026)

The Pure Unexplained Public Sector Gap Across the Unconditional Pay Distribution using the Firpo et al. (2018) Procedure



Conclusion and policy implication

- The average adjusted public sector hourly net pay premium is 0.54 log points, with an unexplained or treatment gap of 0.25 log points.

- The gap peaks at the median and shows a slight decline thereafter.

- Permanent contracts and fewer working hours enhance the attractiveness of public sector jobs.

- These findings emphasize the presence of low pay in the private sector across the pay distribution.

- There is an imperative to focus policy on improving private sector jobs in terms of pay & conditions and adhere to legal labour standards.