## Ethnicity and Gender in the labour market in Central and South East Europe

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## Presentation

- Motivation
- Data
- Basic description of the situation of Roma (men &) women in CSEE
- A few words on previous work
- Some analysis
- Some concluding observations

## Motivation

- Roma (largest ethnic minority in CSEE) hardest hit by transition from the market in CSEE – have unemployment rates far above, and employment rates and wages far below – those of majority populations;
- Roma women doubly disadvantaged in contrast to e.g. African American women in the USA – Roma/non-Roma gap larger for women than for men; and,
- Very little work on this area particularly as regards Roma **women**

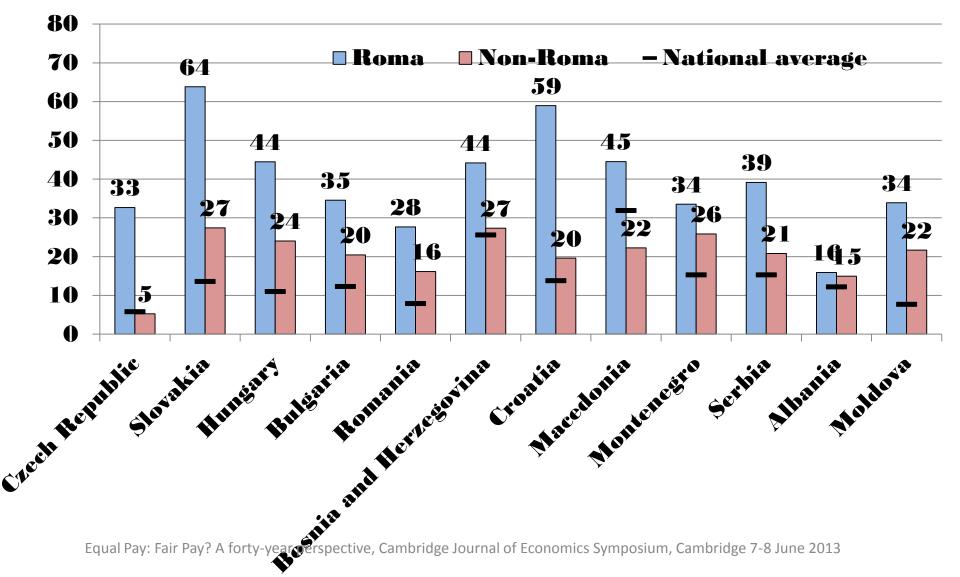
## **UNDP/WB** survey on Roma

- 12 countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Czech Republic, Hungary, Macedonia, Montenegro, Moldova, Romania, Serbia, and Slovakia)
- c. 3500 Roma & c. 1000 Non-Roma living in close proximity in each country
- April/May 2011
- Similar (countries and approach) to a UNDP regional survey undertaken in December 2004

## Disadvantage (1): Unemployment

 In CSEE, unemployment rates of Roma men are much higher than for non-Roma men;

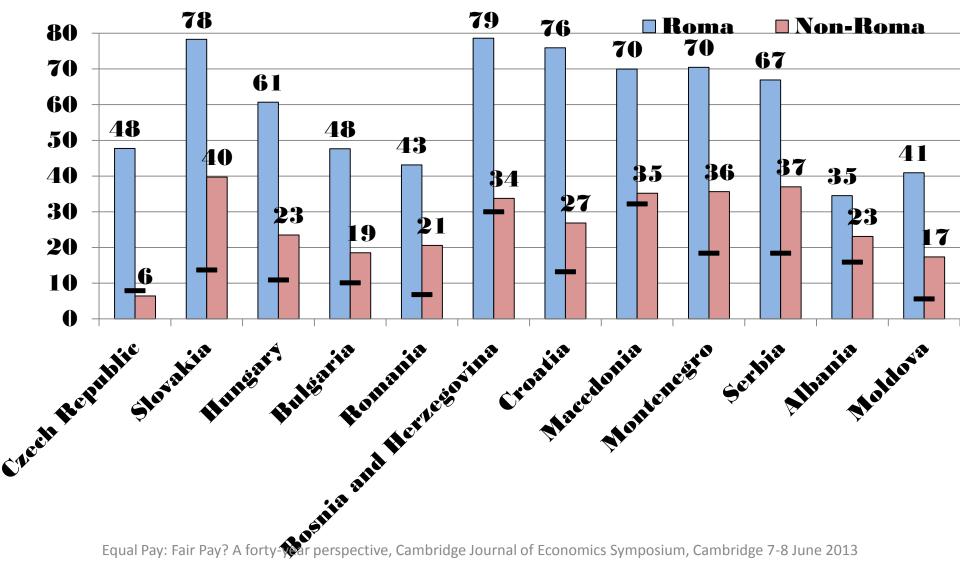
#### **Disadvantage (1):** Unemployment rates of **male** Roma and non-Roma in CSEE, 2011 (%)



## Disadvantage (1): Unemployment

- In CSEE, unemployment rates of Roma men are much higher than for non-Roma men;
- Amongst Roma women unemployment rates are: a) much higher than for non-Roma women AND Roma men;

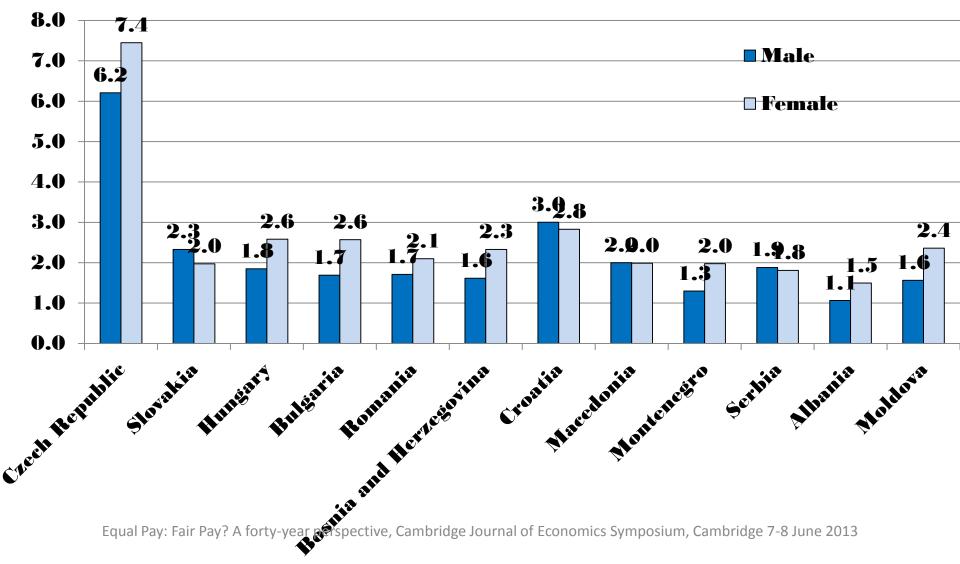
#### **Disadvantage (1):** Unemployment rates of female Roma and non-Roma in CSEE, 2011



## Disadvantage (1): Unemployment

- In CSEE, unemployment rates of Roma men are much higher than for non-Roma men;
- Amongst Roma women unemployment rates are: a) much higher than for non-Roma women AND Roma men; **and**,
- b) the ethnic 'gap' is greater for women than men (n.b. equivalent to saying that the gender gap is larger for Roma than non-Roma)

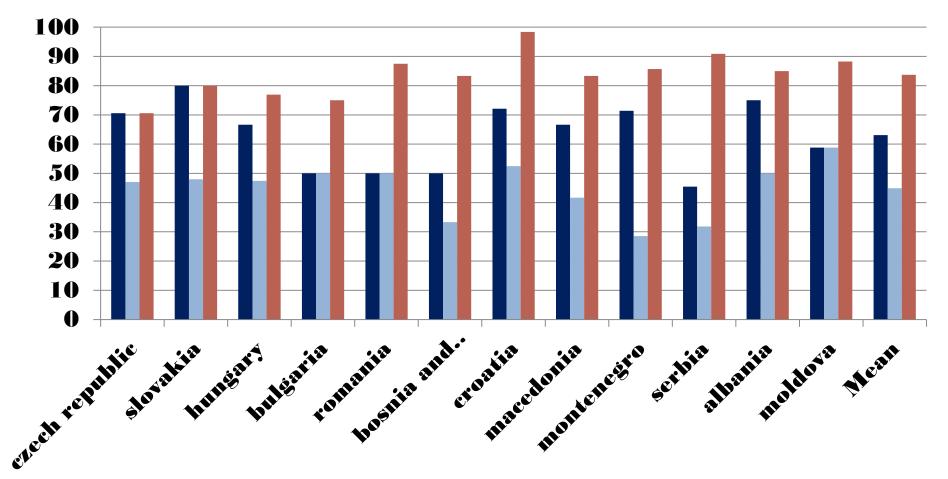
## **Disadvantage (1):** Ratio of Roma to non-Roma unemployment rates, 2011



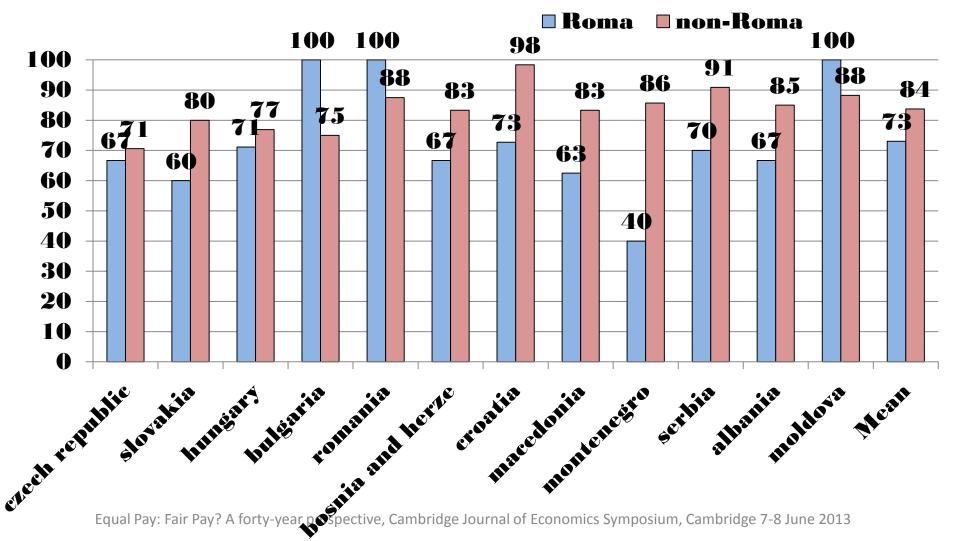
#### Disadvantage (2): Wages (median wages as % of median wages of N-R men)

**Roma Men Roma women** 

N-R Women



#### Disadvantage (2): Wages (median wages: Males vs. Females)



ective, Cambridge Journal of Economics Symposium, Cambridge 7-8 June 2013

# Why?

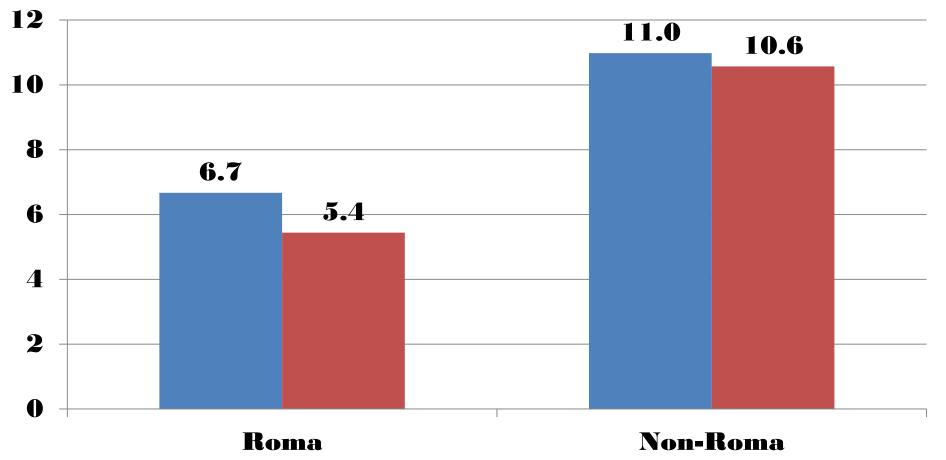
2 typical (and polarizing) explanations:

1. Low Educational Attainment amongst Roma

2. Discrimination in the Labour Market

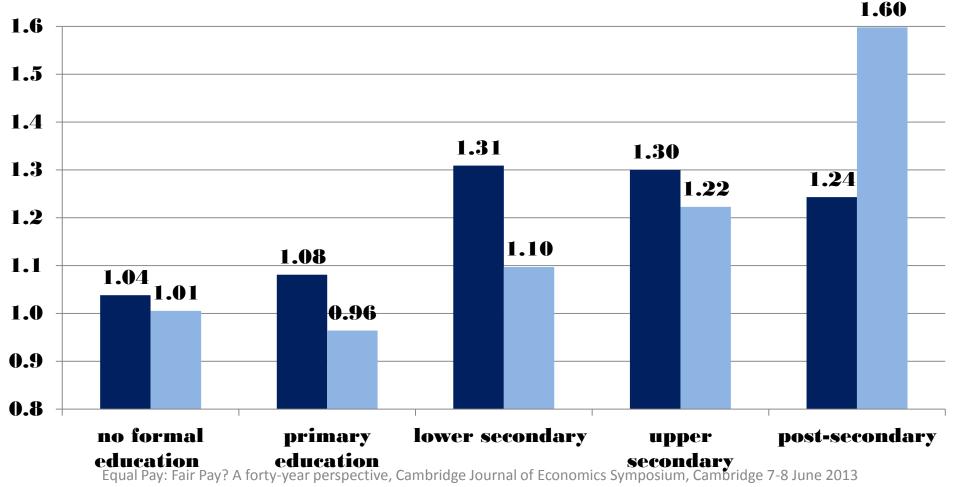
### Low Educational Attainment? Education is lower amongst Roma (Mean Years of schooling, 25-64 year olds)

males females



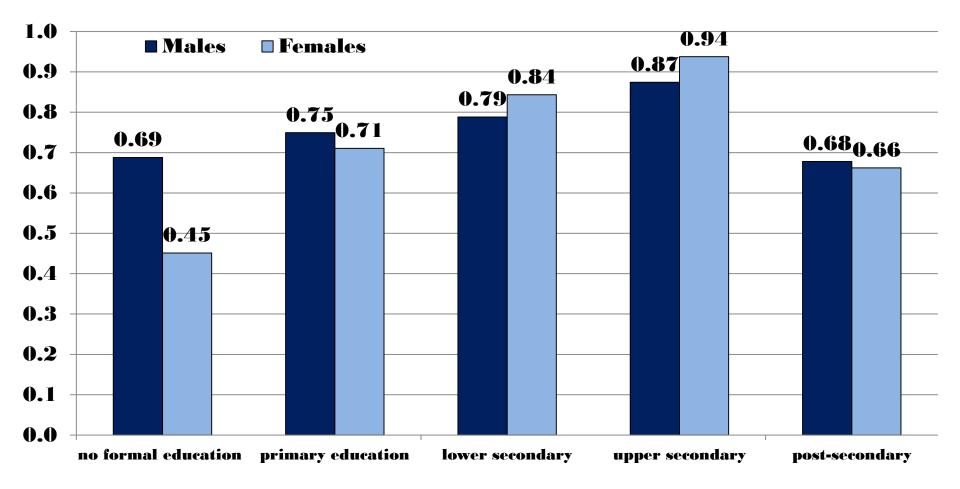
#### Low Educational Attainment? But the R/N-R gap doesn't disappear as educational attainment rises (R/N-R ratio of jobless rates by education)

■ Males ■ Females



## **Low Educational Attainment?**

Although for wages the picture is slightly different (Roma/non-Roma ratio of median wages by educational attainment)



## Serious problem with analysing this question:

Precisely, the Low Roma educational attainment – in particular, very few Roma have tertiary education and very few non-Roma have no, or little, education

#### Towards Explaining Disadvantage: Previous work & some indicators for the present study

#### **On Roma & Discrimination**

- Milcher & Fischer (2011): evidence of wage discrimination against the Roma in Albania and Kosovo, but not in Bulgaria, Croatia or Serbia.
- O'Higgins (2006, **2010**): both (**education** and **discrimination**) explanations have some validity and are connected – lower (**absolute**) returns to education (due to discrimination) for Roma make it rational for them to invest in less human capital
- Trentini (2011) finds also lower **relative** rates of return in Bulgaria
- O'Higgins (2010): in Macedonia significant portion of the wage differential is explained by Roma engagement in the **informal sector.** This appears to be more important that either occupation or industrial sector per se.

#### [N.B. all the above use Blinder-Oaxaca type approach]

• O'Higgins & Brüggemann (2013) find evidence of cumulative 'discrimination' (or disadvantage) with Roma children being channelled into special schools (in CZ & SK) which severely affects their educational attainment

#### **On Gender discrimination amongst Roma**

#### **???** (practically nothing quantitative in the literature)

### Towards Explaining Disadvantage: Some simple econometrics

(Employment and wage equations)

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	Employment	Wages	Wages controlling for selection into		
			employment		
	Coeff.	Coeff.	Coeff.		
	CUCII.	( $\approx$ % change in wages)	( $\approx$ % change in wages)		
Roma	22***	27***	21**		
Female	55***	21***	.04		
Roma and Female	21***	02	.13***		
n	23366	8422	8422		
(Pseudo) R <sup>2</sup>	.16	.32			
Wald test of significance			2178.76***		

## Towards explaining disadvantage: Returns to education

	Employment				Wages			
	Male		Female		Male		Female	
	Roma	Non- Roma	Roma	Non- Roma	Roma	Non- Roma	Roma	Non- Roma
Experience	0.028	0.071	0.066	0.089	0.004	-0.005	-0.027	-0.039
Experience <sup>2</sup>	-0.001	-0.002	-0.001	-0.002	0.000	0.000	0.001	0.001
primary education	0.054	0.075	0.167	0.135	0.091	-0.057	0.112	0.309
lower secondary	0.136	0.169	0.297	0.310	0.275	0.319	0.297	0.182
upper secondary	0.472	0.393	0.960	0.805	0.364	0.489	0.203	0.060
post-secondary	0.855	0.627	1.655	1.566	0.444	0.813	-0.058	0.201
Intercept	0.316	0.138	-1.417	-1.431	5.768	5.726	6.590	6.619
n	8114	3341	8461	3450	3509	826	1724	1301
Pseudo-R <sup>2</sup>	0.07	0.12	0.09	0.18				
Rho					-0.84	0.03	-0.89	-0.93

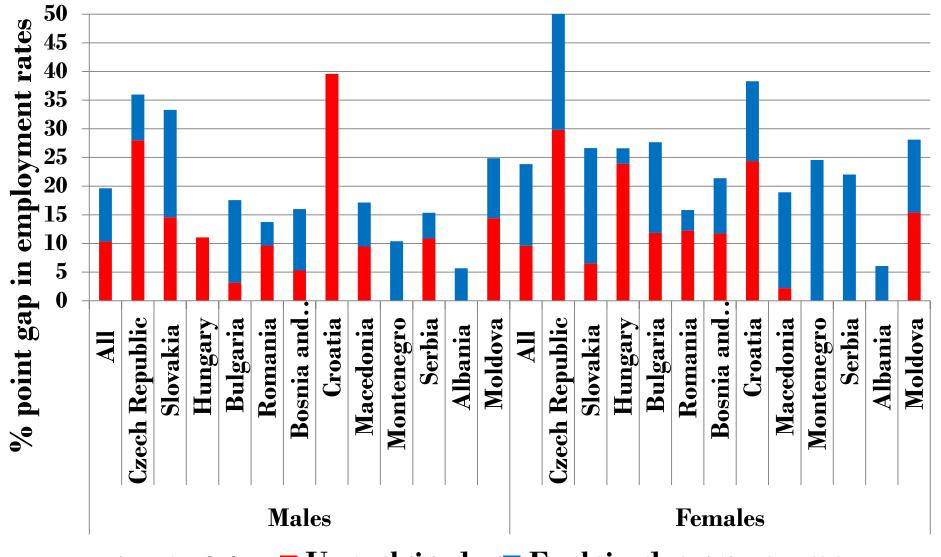
# Typical approach:

- Use these types of estimates to undertake linear (wages) and/or non-linear (employment) parametric (regression based) decomposition a la Oaxaca-Blinder
- But there is a major problem of (un-) common support
- (problem also applies to other matching methodologies e.g. propensity score matching)

## More useful approach = Decomposition based on Matching (Nopo, 2008)

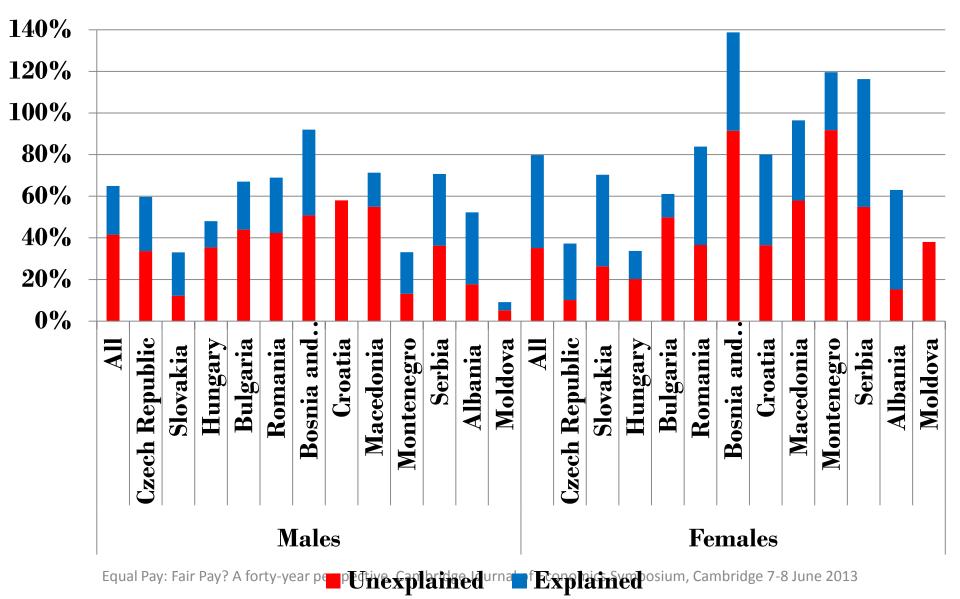
- Comparison over common support particularly important in the present context
- One-to-Many matching
- 4-way decomposition of differences in outcome:
  - a. Explained by
    - i. differences between Roma outcome for those within and outside the common support
    - ii. differences between non-Roma outcome for those within and outside the common support
    - iii. differences in Roma and non-Roma characteristics
  - **b.** not explained by i. iii.
- Main problem = 'curse of dimensionality' i.e. can't control for many other factors (in practice, location, education and age-group as proxy for experience)

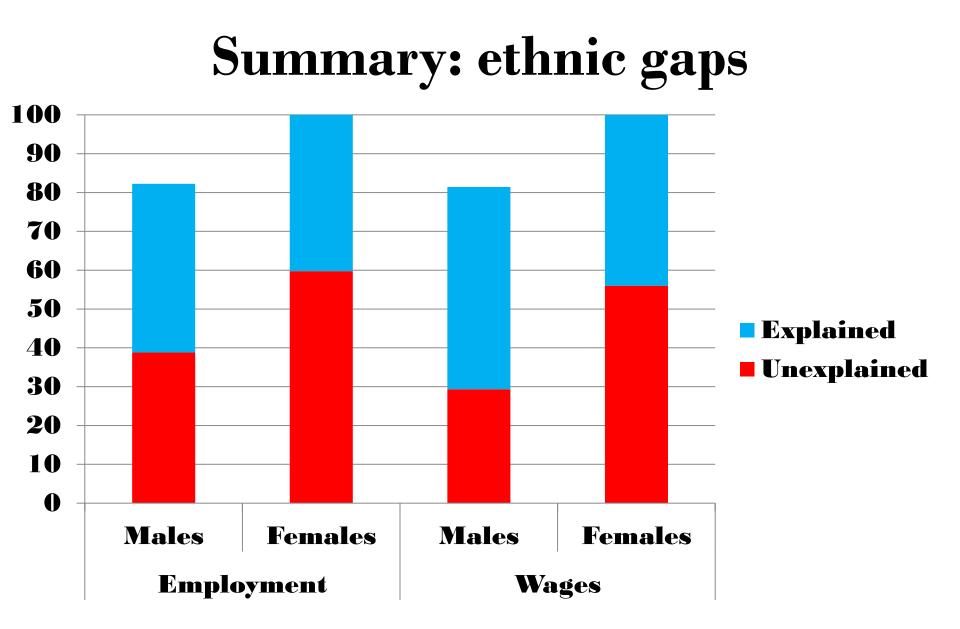
#### Estimation of unexplained differences in employment using nonparametric matching



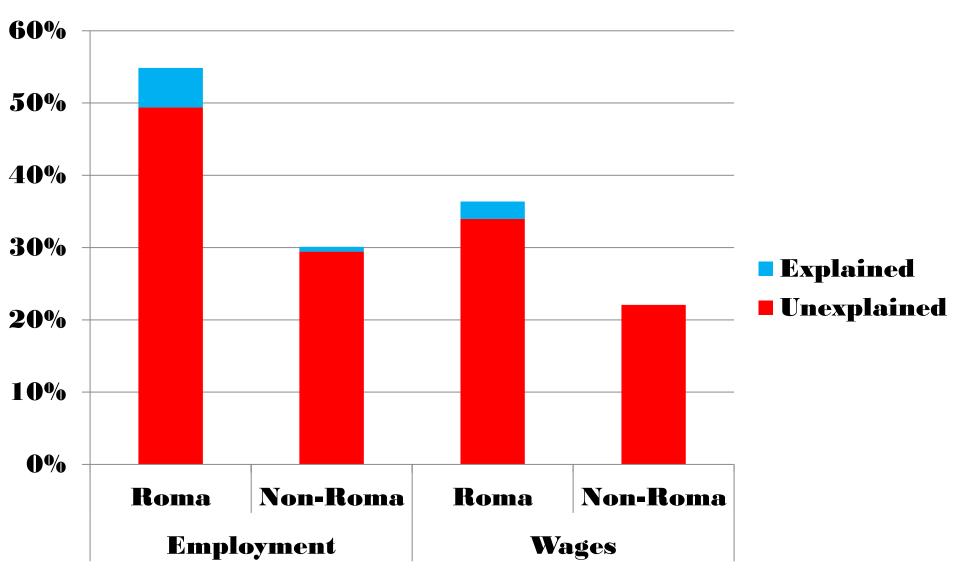
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# Estimation of unexplained differences in wages using nonparametric matching





## Looking at Gender differences directly



## Some observations

#### **Basic findings:**

- Ethnic gaps in employment and wages larger for women than men – in other words, gender gaps are greater for Roma than non-Roma – i.e. evidence of intersectionality (or cumulative disadvantage/discrimination)
- The portion of 'ethnic' employment and wage gaps not attributable to differences in education and experience is smaller for women than men
- The gender gap for both Roma and non-Roma is hardy explained at all by differences in education and experience...
- (not shown) ...Nor is it attributable to (identifiable) school quality (e.g. special schools) nor – for wages – to involvement in the informal sector

# Some observations (2)

- The pattern of unexplained gender differences (apparently) remarkably similar for Roma and non-Roma
- Factors underlying gender disadvantage are quite different from those driving the ethnic gaps

# Likely contenders to 'explain' Roma gender gaps:

- 'occupational segregation' and similar mechanisms.
- 'Effective' labour market experience (thusfar controlled only for potential experience)