



# Pay Difference by Gender and Immigration Status in Italy

Maria Laura Di Tommaso

(Department of Economics and Statistics, University of Torino and CHILD Collegio Carlo Alberto)

Daniela Piazzalunga

(University of Torino and CHILD Collegio Carlo Alberto)

*Cambridge Journal of Economics* Symposium

7-8 June 2013

# Outline

---

- ▶ Background
- ▶ Our Contribution
- ▶ Methodology
- ▶ Data
- ▶ Descriptive statistics
- ▶ Unadjusted wage gaps
- ▶ Results
- ▶ Conclusions
- ▶ Further developments

# Background: some media stories

---

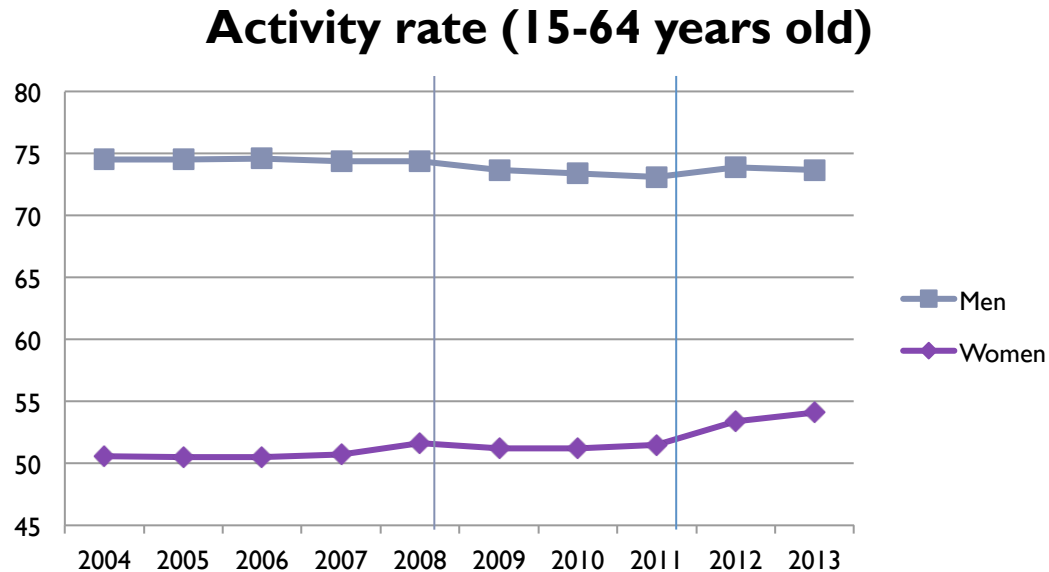
- ▶ Pay gender gap in Italy very low compared to European countries.
- ▶ The economic crisis has a less negative impact on women than men .

# Background: a long history of gender discrimination

---

- ▶ Female participation rates from 41% in 1983 to 53% in 2012.
- ▶ Among OECD countries: highest gender gap in leisure time.
- ▶ Men: 80 minutes per day of leisure more than women.
- ▶ “double burden” and lack of policies to support families with children:
  - ▶ Low fertility rates.
  - ▶ Low female political participation (21% of women among MP’s in 2012)
- ▶ Increasing inflow of female immigrants working in child and elderly care and domestic work ( Pastore and Villosio 2012).
- ▶ Mediterranean welfare model: women (Italians and migrants) substitute of welfare support (Bettio, Simonazzi, Villa 2006).

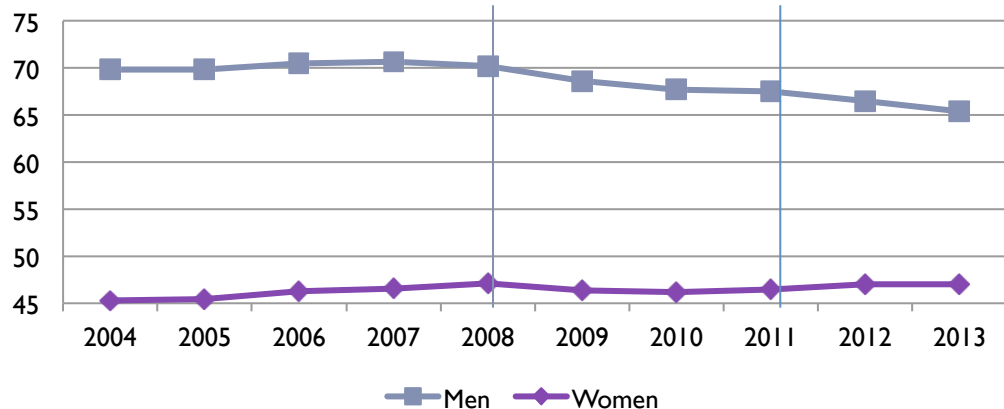
# Labour market outcomes (2004-2013)



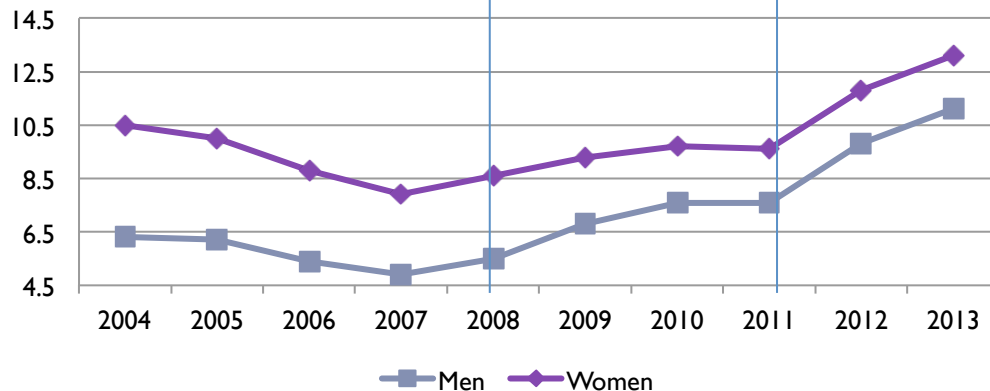
Source: own elaboration based on data from ISTAT (May 2013), Employment and unemployment (monthly), seasonally adjusted data released on 31 may 2013 (last reference period: April 2013)

# Labour market outcomes (cont'd)

## Employment rate (15-64 years old)



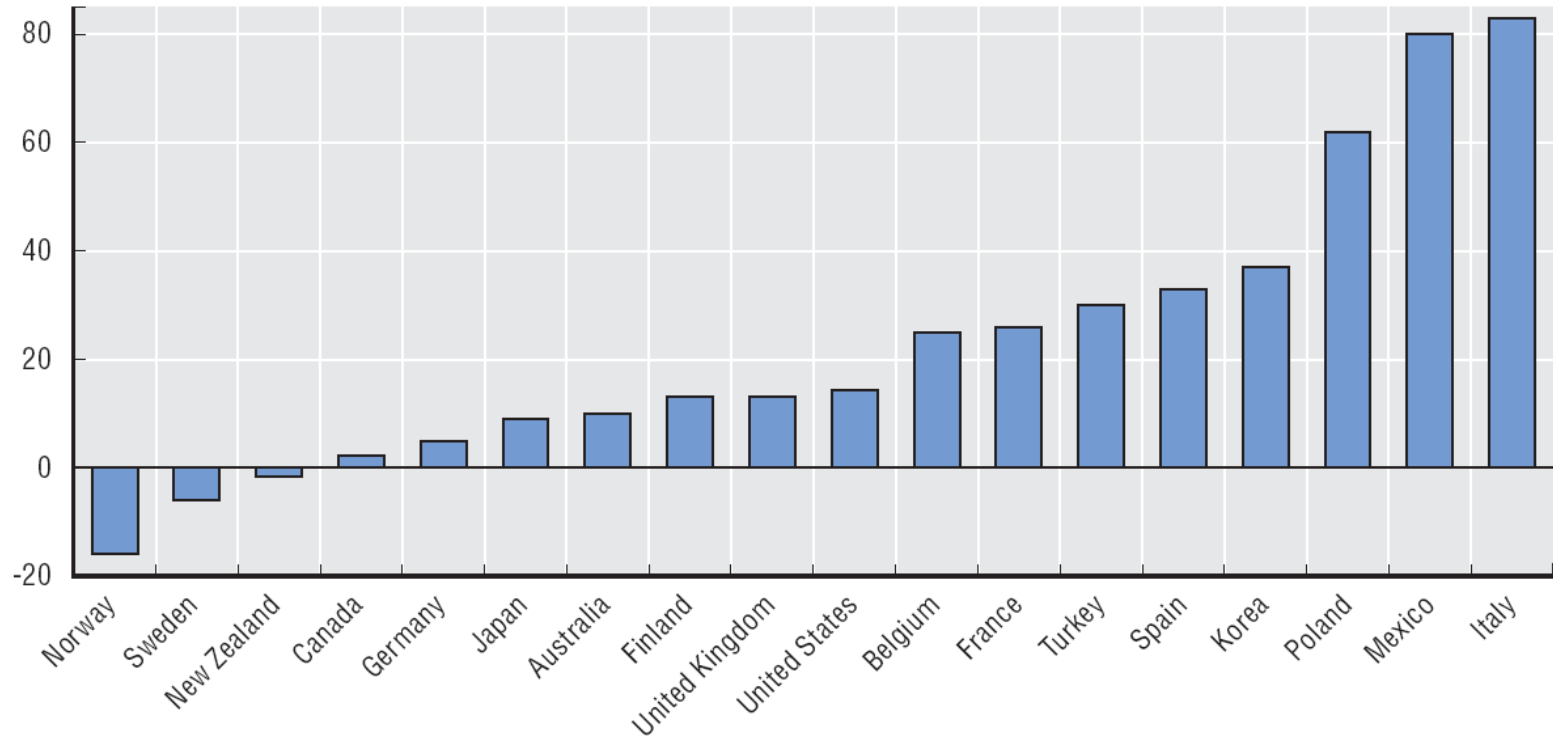
## Unemployment rate (total)



Source: own elaboration based on data from ISTAT (May 2013)

### Figure 2.11. **Men generally have more broadly-defined leisure than women**

Gender differences in broadly-defined leisure time, minutes per day, positive figures show a male advantage



Note: “Broadly-defined leisure” refers to daily and gender-specific levels of personal care normalised to the lowest country level and all excess personal care time is re-allocated to the initial leisure value for both genders.

Source: Secretariat estimates based on national and multinational time-use surveys (2006 where available).

# Goals of the paper

---

- ▶ Gender pay gap of Italians
- ▶ Double discrimination of migrant women.
- ▶ Earnings discrimination in Italy and its changes during the current economic crisis.



# Main results

---

- ▶ Observed gender and migrant earnings gaps are important in the perpetuation of a male-dominated society.
- ▶ The high and increasing inflow of immigrant women who substitute Italian women in care and domestic work allows the perpetuation of a state in which men do not change their role either in the household or in the public sphere.
- ▶ Increased gender pay gap during the economic crisis: a signal of increasing inequality.

# Methodology

---

- ▶ **Oaxaca-Blinder decomposition:**
  - ▶ Gender Wage Gap (for both Italians and foreigners);
  - ▶ Ethnic Wage Gap (for both men and women);
  - ▶ Explained (due to differences in qualifications) / Unexplained (due to differences in returns).
  
- ▶ **Shamsuddin decomposition:**
  - ▶ Double-negative effect of being a *woman* and *immigrant*.

# Methodology: Shamsuddin dec.

$$\Delta \bar{W} = \ln \bar{W}_m^I - \ln \bar{W}_w^F = \underbrace{(\ln \bar{W}_m^I - \ln \bar{W}_m^F)}_{\text{Ethnic differential}} + \underbrace{(\ln \bar{W}_m^F - \ln \bar{W}_w^F)}_{\text{Gender differential}}$$

$$\begin{aligned} \Delta \bar{W} &= \ln \bar{W}_m^I - \ln \bar{W}_w^F = (\ln \bar{W}_m^I - \ln \bar{W}_m^F) + (\ln \bar{W}_m^F - \ln \bar{W}_w^F) = \\ &= \underbrace{[(\alpha_m^I - \alpha_m^F) + (\hat{\beta}_m^I - \hat{\beta}_m^F) \bar{X}_m^F]}_{\text{Unexplained ethnic gap (a)}} + \underbrace{(\bar{X}_m^I - \bar{X}_m^F) \hat{\beta}_m^I}_{\text{Explained ethnic gap (b)}} + \underbrace{[(\alpha_m^F - \alpha_w^F) + (\hat{\beta}_m^F - \hat{\beta}_w^F) \bar{X}_w^F]}_{\text{Unexplained gender gap (c)}} + \underbrace{(\bar{X}_m^F - \bar{X}_w^F) \hat{\beta}_m^F}_{\text{Explained gender gap (d)}} \end{aligned}$$

“Double discrimination”: (a) + (c)

Two possible specifications:

- Gender gap between Italians and ethnic gap between women;
- Gender gap between immigrants and ethnic gap between men.

# Data

---

## EU Statistics on Income and Living Conditions (EU-SILC )

- Data on income, poverty, social exclusion, labour, education, housing, and health in the European Union Member States, as well as Norway, Turkey and Switzerland;
- Cross-sectional data for Italy in 2008 and 2011;
- About 40,000 observations;

### *Note:*

- Detailed information on individual wage;
- Live-in workers considered part of the household (w.r.t. LFS);
- Reference population: households residing in the country (non-national underestimated).

# Sample Selection

---

- ▶ Employees
- ▶ Main dependent variable: log hourly wage  
(from “gross monthly earnings for employees”)

<i>Observations</i>	Italian men	Italian women	Foreign men	Foreign women	Tot.
2008	7,711	6,067	491	381	14,650
2011	6,517	5,553	387	356	12,813

# Some descriptive statistics

	2008				2011			
	Italian men	Italian women	Foreign men	Foreign women	Italian men	Italian women	Foreign men	Foreign women
<b>Education</b>								
Tertiary education	12.75	20.24	6.11	14.17	15.24	24.22	8.01	18.82
<b>Sectors (Nace)</b>								
Agriculture	3.27	2.23	8.76	3.67	2.52	1.96	3.88	2.81
Construction	31.14	17.37	39.71	15.75	8.44	1.37	25.32	1.40
Manufacturing	10.21	1.37	22.20	0.26	30.29	14.15	32.04	14.33
Trade	20.46	19.91	17.72	21.26	21.93	21.66	22.74	23.60
Services	34.92	59.12	11.61	59.06	36.83	60.85	16.02	57.87
<b>Occupations (Isco)</b>								
Managers and prof.	10.76	12.51	1.83	3.67	15.11	22.49	1.81	3.37
White collar	37.08	59.60	11.61	18.64	41.58	52.49	9.82	15.73
Blue collar	42.41	12.43	77.80	19.95	37.99	10.59	75.97	17.70
Domestic and care work	9.75	15.46	8.76	57.74	5.31	14.42	12.40	63.20

# Unadjusted wage gaps

2008	Obs.	Mean	Gender wage gap		Ethnic wage gap		Double wage gap
<b>Monthly</b>							
Italian men	7,711	1,938	Italians	20.43	Men	20.67	42.66
Italian women	6,067	1,542			Women	27.94	
Foreign men	491	1,538	Foreigners	27.73			
Foreign women	381	1,111					
<b>Hourly</b>							
Italian men	7,711	11.26	Italians	3.42	Men	22.07	30.11
Italian women	6,067	10.88			Women	27.63	
Foreign men	491	8.78	Foreigners	10.31			
Foreign women	381	7.87					
2011	Obs.	Mean	Gender wage gap		Ethnic wage gap		Double wage gap
<b>Monthly</b>							
Italian men	6,517	2,068	Italians	21.28	Men	23.13	43.36
Italian women	5,553	1,628			Women	28.05	
Foreign men	387	1,590	Foreigners	26.31			
Foreign women	356	1,172					
<b>Hourly</b>							
Italian men	6,517	12.04	Italians	6.98	Men	22.95	31.14
Italian women	5,553	11.20			Women	25.97	
Foreign men	387	9.28	Foreigners	10.62			
Foreign women	356	8.29					

# Results: regressions

2008	Overall	All Italians	All foreigners	All women	All men
Women	-0.11*** (0.01)	-0.11*** (0.01)	-0.10*** (0.03)		
Italian	0.12*** (0.01)			0.15*** (0.02)	0.10*** (0.01)
<b>Observations</b>	14,650	13,778	872	6,448	8,202
<b>Adj. R2</b>	0.39	0.39	0.25	0.39	0.40

2011	Overall	All Italians	All foreigners	All women	All men
Women	-0.13*** (0.01)	-0.13*** (0.01)	-0.09*** (0.03)		
Italian	0.12*** (0.01)			0.13*** (0.02)	0.12*** (0.02)
<b>Observations</b>	12,813	12,070	743	5,909	6,904
<b>Adj. R2</b>	0.40	0.40	0.20	0.38	0.40

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parenthesis.

*Controls:* age, experience, squared experience, region, civil status, number of children, education, sector of employment (Nace), type of occupation (Isco).



	2008				2011			
	Italian men	Italian women	Foreign men	Foreign women	Italian men	Italian women	Foreign men	Foreign women
<b>Education (Isced)</b>								
Primary	-0.03 (0.09)	0.07 (0.15)	0.09 (0.06)	-0.13 (0.15)	-0.14** (0.06)	-0.27*** (0.06)	0.12 (0.17)	-0.01 (0.21)
Lower secondary	0.04 (0.09)	0.18 (0.15)	0.06 (0.05)	-0.02 (0.14)	-0.02 (0.06)	-0.17*** (0.05)	0.15 (0.16)	0.15 (0.19)
Upper secondary	0.15* (0.09)	0.34** (0.15)	0.08* (0.05)	0.01 (0.14)	0.08 (0.06)	-0.04 (0.05)	0.21 (0.16)	0.09 (0.19)
Post-secondary	0.16* (0.09)	0.39*** (0.15)	0.04 (0.10)	-0.08 (0.15)	0.07 (0.06)	-0.02 (0.05)	-0.00 (0.19)	0.29 (0.23)
Tertiary	0.31*** (0.09)	0.49*** (0.15)	0.11 (0.08)	-0.03 (0.15)	0.24*** (0.06)	0.11** (0.05)	0.26 (0.16)	0.19 (0.19)
<b>Sectors (Nace)</b>								
Agriculture	-0.18*** (0.02)	-0.13*** (0.04)	-0.21*** (0.04)	-0.29* (0.15)	-0.16*** (0.03)	-0.13*** (0.04)	-0.13* (0.07)	-0.15 (0.14)
Construction	-0.02 (0.01)	-0.01 (0.04)	-0.05 (0.03)	0.84*** (0.10)	0.00 (0.01)	0.02 (0.04)	0.04 (0.03)	-0.21* (0.12)
Trade	-0.05*** (0.01)	-0.05*** (0.02)	0.01 (0.04)	0.00 (0.08)	-0.05*** (0.01)	-0.04** (0.02)	-0.02 (0.04)	-0.16** (0.07)
Services	0.06*** (0.01)	0.06*** (0.01)	0.09 (0.06)	-0.05 (0.08)	0.03*** (0.01)	0.05*** (0.01)	-0.09* (0.05)	-0.15** (0.07)
<b>Occupations (Isco)</b>								
Managers	0.28*** (0.02)	0.36*** (0.02)	0.41*** (0.15)	0.61*** (0.14)	0.28*** (0.02)	0.30*** (0.02)	0.54*** (0.18)	0.52*** (0.13)
White collar	0.10*** (0.01)	0.15*** (0.02)	-0.07 (0.05)	0.20** (0.08)	0.12*** (0.01)	0.16*** (0.02)	0.07 (0.05)	0.28*** (0.08)
Domestic and care	-0.02 (0.01)	-0.03 (0.02)	-0.24*** (0.06)	-0.01 (0.08)	-0.06*** (0.02)	-0.04** (0.02)	-0.12** (0.06)	0.06 (0.06)
<b>Observations</b>	7,711	6,067	491	381	6,517	5,553	387	356
<b>Adj. R2</b>	0.40	0.38	0.28	0.20	0.40	0.39	0.25	0.11

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parenthesis. Reference group: Isced 0 (no education or pre-primary educ.), Manufacture, Blue collar.

# Oaxaca-Blinder decomposition

<b>2008</b>	Italian gender gap	Foreigners gender gap	Men ethnic gap	Women ethnic gap
Difference	0.042*** (0.007)	0.135*** (0.025)	0.216*** (0.015)	0.309*** (0.021)
Explained	-0.069*** (0.005)	0.051*** (0.028)	0.113*** (0.012)	0.163*** (0.015)
Unexplained	0.110*** (0.006)	0.084*** (0.034)	0.103*** (0.015)	0.146*** (0.022)
% Explained	-165.05%	38.09%	52.43%	52.77%
% Unexplained	265.05%	61.91%	47.56%	47.22%

<b>2011</b>	Italian gender gap	Foreigners gender gap	Men ethnic gap	Women ethnic gap
Difference	0.068*** (0.008)	0.145*** (0.028)	0.222*** (0.018)	0.300*** (0.023)
Explained	-0.065*** (0.006)	0.095*** (0.030)	0.105*** (0.012)	0.168*** (0.014)
Unexplained	0.132*** (0.007)	0.050 (0.039)	0.118*** (0.017)	0.131*** (0.025)
% Explained	-95.67%	65.52%	47.05%	56.12%
% Unexplained	195.67%	34.48%	52.95%	43.88%

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Robust standard errors in parenthesis.

# Shamsuddin decomposition

	2008		2011	
	Log gap <sup>a</sup> : 0.351***		Log gap <sup>a</sup> : 0.367***	
<i>Gap</i>	<i>0.042***</i>	<i>0.135***</i>	<i>0.068***</i>	<i>0.145***</i>
Explained	<i>Italian gender gap</i> -0.069*** (-19.68%)	<i>Foreigners gender gap</i> 0.051*** (14.55%)	<i>Italian gender gap</i> -0.065*** (-17.70%)	<i>Foreigners gender gap</i> 0.095*** (25.87%)
Unexplained	0.110*** (31.38%)	0.084*** (23.96%)	0.132*** (35.95%)	0.050 (13.62%)
<i>Gap</i>	<i>0.309***</i>	<i>0.216***</i>	<i>0.300***</i>	<i>0.222***</i>
Explained	<i>Women ethnic gap</i> 0.163*** (46.49%)	<i>Men ethnic gap</i> 0.113*** (32.23%)	<i>Women ethnic gap</i> 0.168*** (45.75%)	<i>Men ethnic gap</i> 0.105*** (28.59%)
Unexplained	0.146*** (41.64%)	0.103*** (29.38%)	0.131*** (35.67%)	0.118*** (31.13%)
<b>Double discrimination</b>	0.256 <b>(73.02%)</b>	0.187 <b>(53.34%)</b>	0.263 <b>(71.62%)</b>	0.168 <b>(45.75%)</b>

\*  $p < 0.10$ , \*\*  $p < 0.05$ , \*\*\*  $p < 0.01$ . Percentage of the overall difference in parenthesis.

<sup>a</sup> [ $\log(\text{Italian men's wage}) - \log(\text{foreign women's wage})$ ]

# Conclusions

---

- ▶ The economic crisis (still going on) in Italy increased the Italian gender wage gap;
- ▶ We need to extend our analysis to understand the reasons. According to (Bettio F., 2013), this could be due to women entering the labour market in low-paid occupations (e.g. as caregivers) and in precarious jobs for highly-educated; we plan to apply a quantile regression decomposition to analyse what is causing the increasing gender wage gap;
- ▶ While Italian and foreign women were complementary until 2008, now there is an increased competition between them in the (non-cohabiting) family services (Marchetti *et al.*, 2013);
- ▶ The gender wage gap between foreigners is almost stable (small increase), but the explained part increased from 38% to 65%;
- ▶ The ethnic wage gaps are larger than the gender ones (especially for women), but more than 50% is due to differences in characteristics (with a slight reduction of the explained part for the male ethnic gap);

# Conclusions (cont'd)

---

- ▶ The “double-negative effect”, due to gender and ethnic status, slightly increased from 2008 to 2011, mainly because of the growth of Italian gender gap;
- ▶ However, the “double discrimination” decreased from 53%-73% to 45%-71%

# Further development

---

- ▶ Potential gender gap (taking into account the self-selection of working people, especially working women in Italy)
- ▶ When available: 2013 data

---

Thank you!