Gender Equality, Women's Empowerment and Public Policy

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Gender Gaps Around the World

Global Gender Gap Index (World Economic Forum, 2021)

- Economic opportunities
- Education
- Health and survival
- Political empowerment

No country in the world has reached gender equality

The best performers (Iceland, Finland, Norway, Sweden) have closed more than 80% of the gender gap.

Italy ranks 63 out of 156 countries (114 for economic opportunities)

Global Performance

The world has closed

96% of the gap in health

95% of the gap in education

Only 58% of the gap in economic results

Only 22% of the gap in political empowerment

Country	Rank		Score
	Regional	Global	
Iceland	1	1	0.892
Finland	2	2	0.861
Norway	3	3	0.849
Sweden	4	5	0.823
Ireland	5	9	0.800
Switzerland	6	10	0.798
Germany	7	11	0.796
Belgium	8	13	0.789
Spain	9	14	0.788
France	10	16	0.784
Austria	11	21	0.777
Portugal	12	22	0.775
United Kingdom	13	23	0.775
Canada	14	24	0.772
Denmark	15	29	0.768
United States	16	30	0.763
Netherlands	17	31	0.762
Luxembourg	18	55	0.726
Italy	19	63	0.721
Cyprus	20	83	0.707
Malta	21	84	0.703
Greece	22	98	0.689

Employment rates, EU (2019)
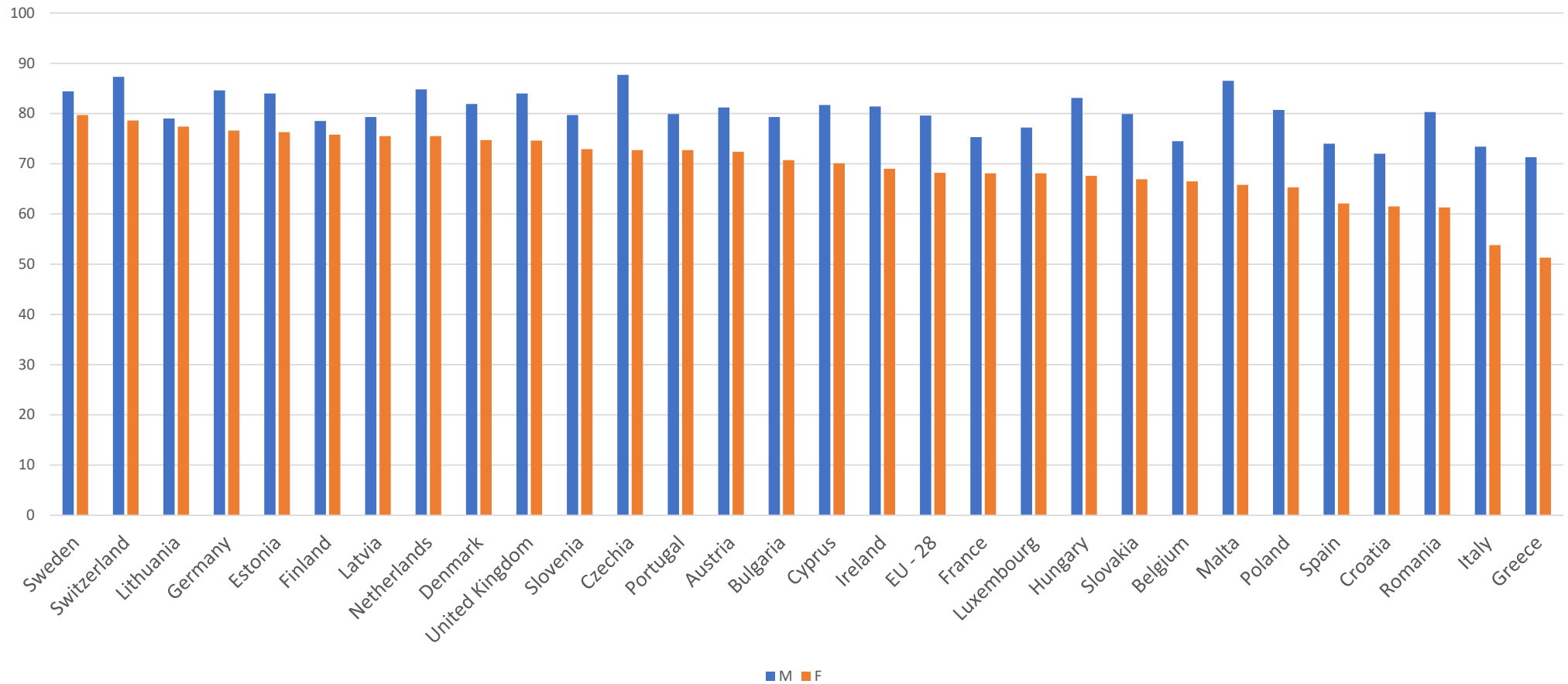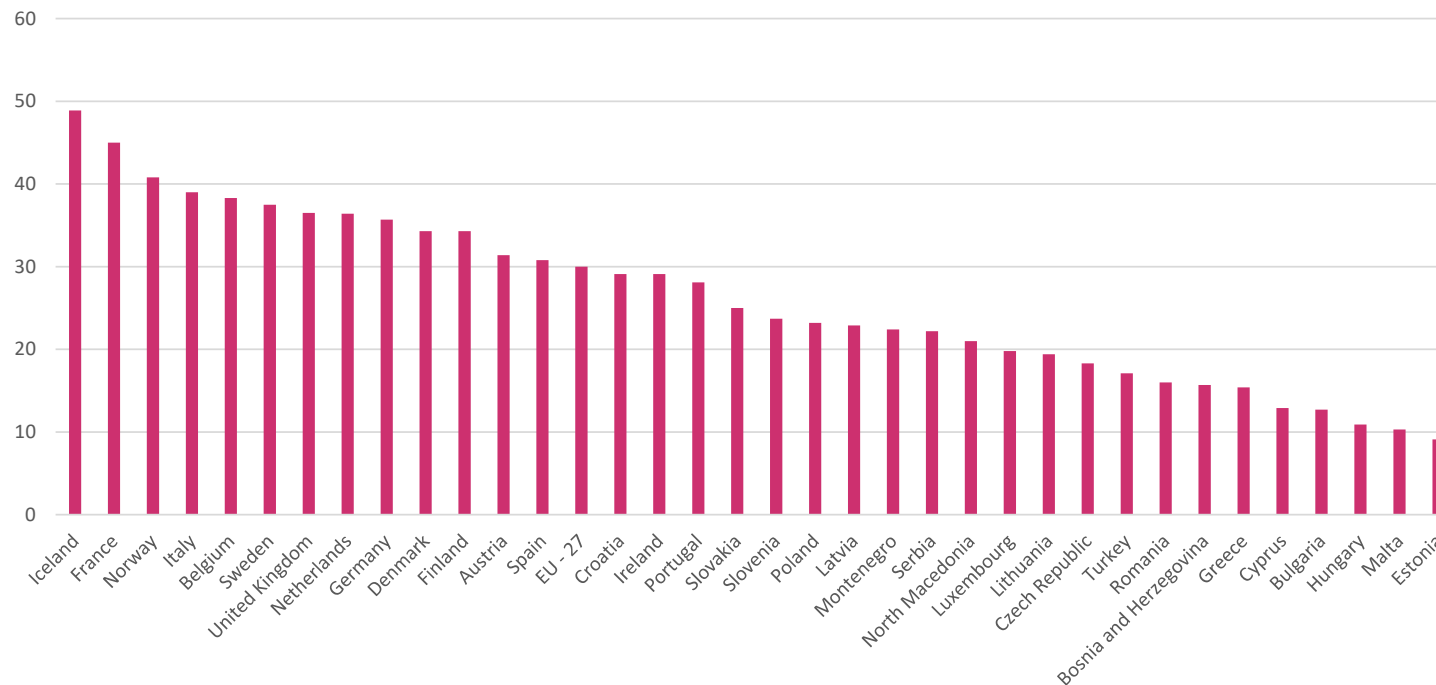

Source: Eurostat, 2019

Share of graduates (25– 34) in Europe
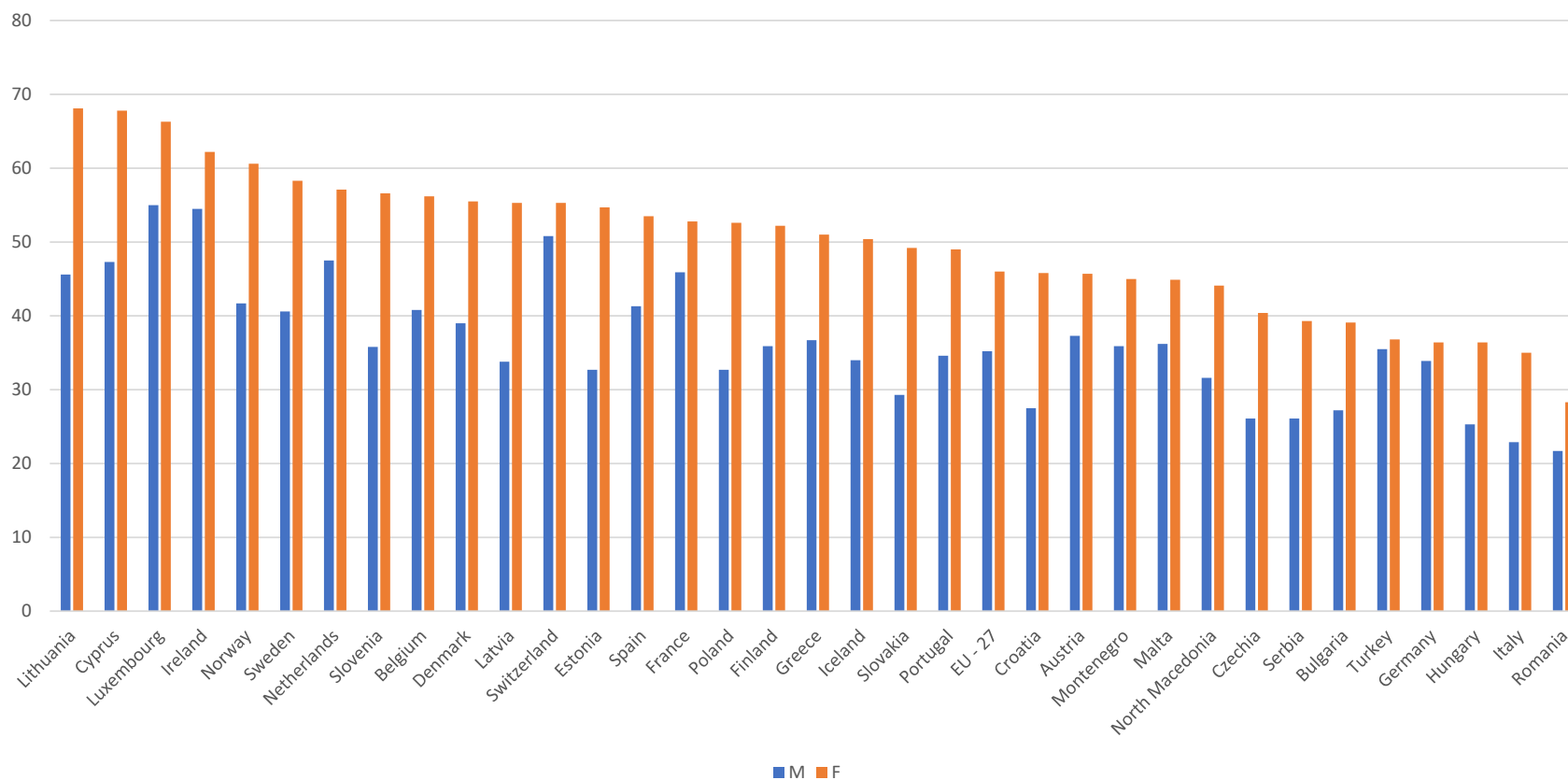
Source: Eurostat, 2020

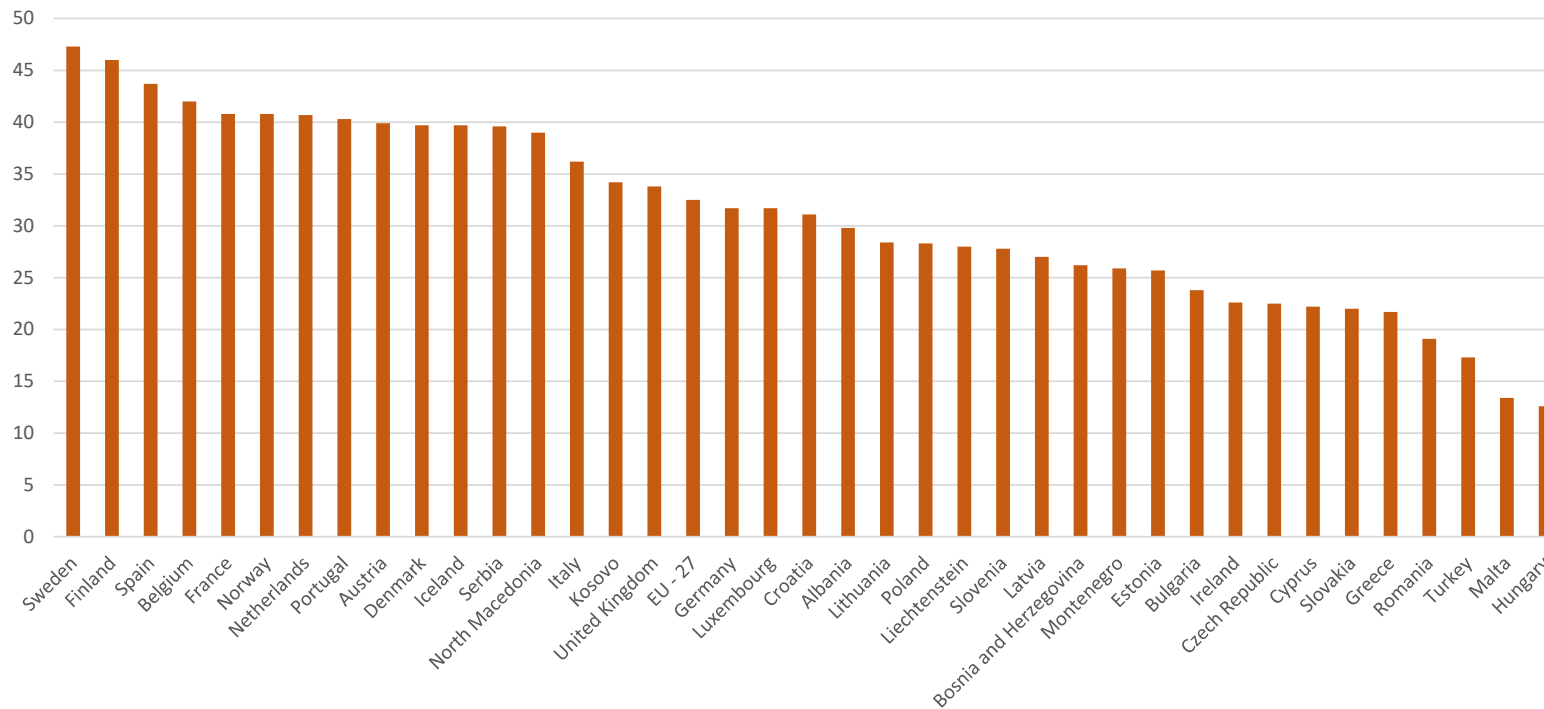# The glass ceiling/ Decision-making positions: Business

Share of women among presidents, board members and employee representatives of the largest listed companies in Europe

Source: EIGE, 2021

The glass ceiling/ Decision-making positions: Politics

Share of women among Members of European National Parliaments


Source: EIGE, 2021

Outline

- Introduction with Data (done)
- Relevant factors (selected)
- From public policy to gender equality: the public channel
- From women's empowerment to public policy: the political channel
- Some results of causal evidence from a recent paper
- Why do we care: gender equality and women's empowerment
- Evidence during the pandemic of Covid-19

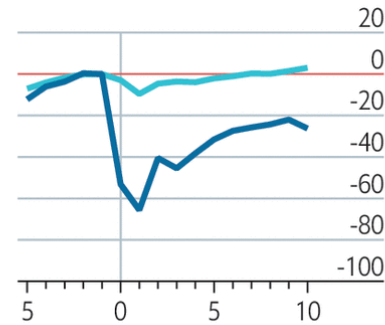# Relevant factors: The Motherhood Penalty

Labour costs
Earnings relative to pre-child earnings, 2015 or latest %

Denmark — Men, Women
Sweden
United States
Years before/after birth of first child
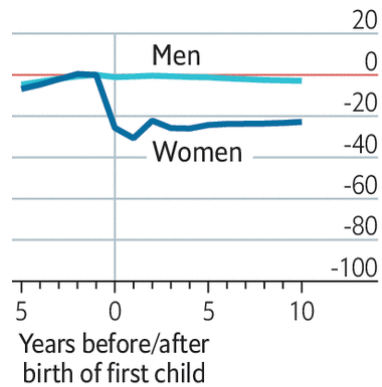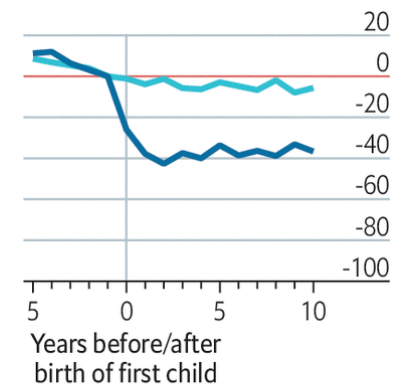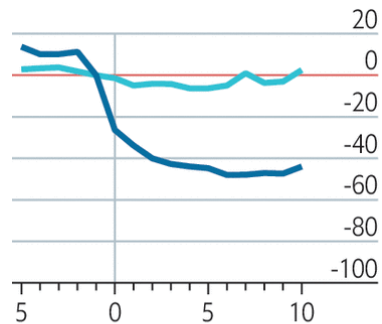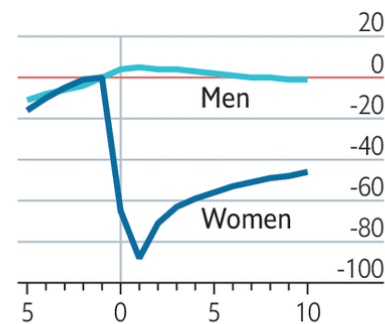
Britain
Austria — Men, Women
Germany
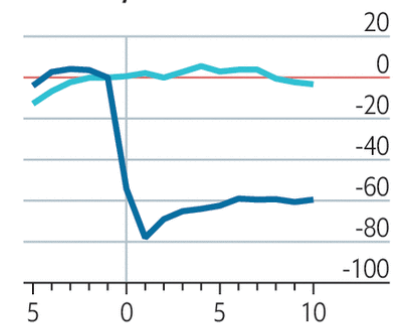
Source: "Child Penalties Across Countries: Evidence and Explanations", 2019, by H. Kleven, C. Landais, J. Posch, A. Steinhauer and J. Zweimüller
The Economist

Fertility Rates and Female Employment

Fertility Rate and Female Employment Rate
OECD 2018
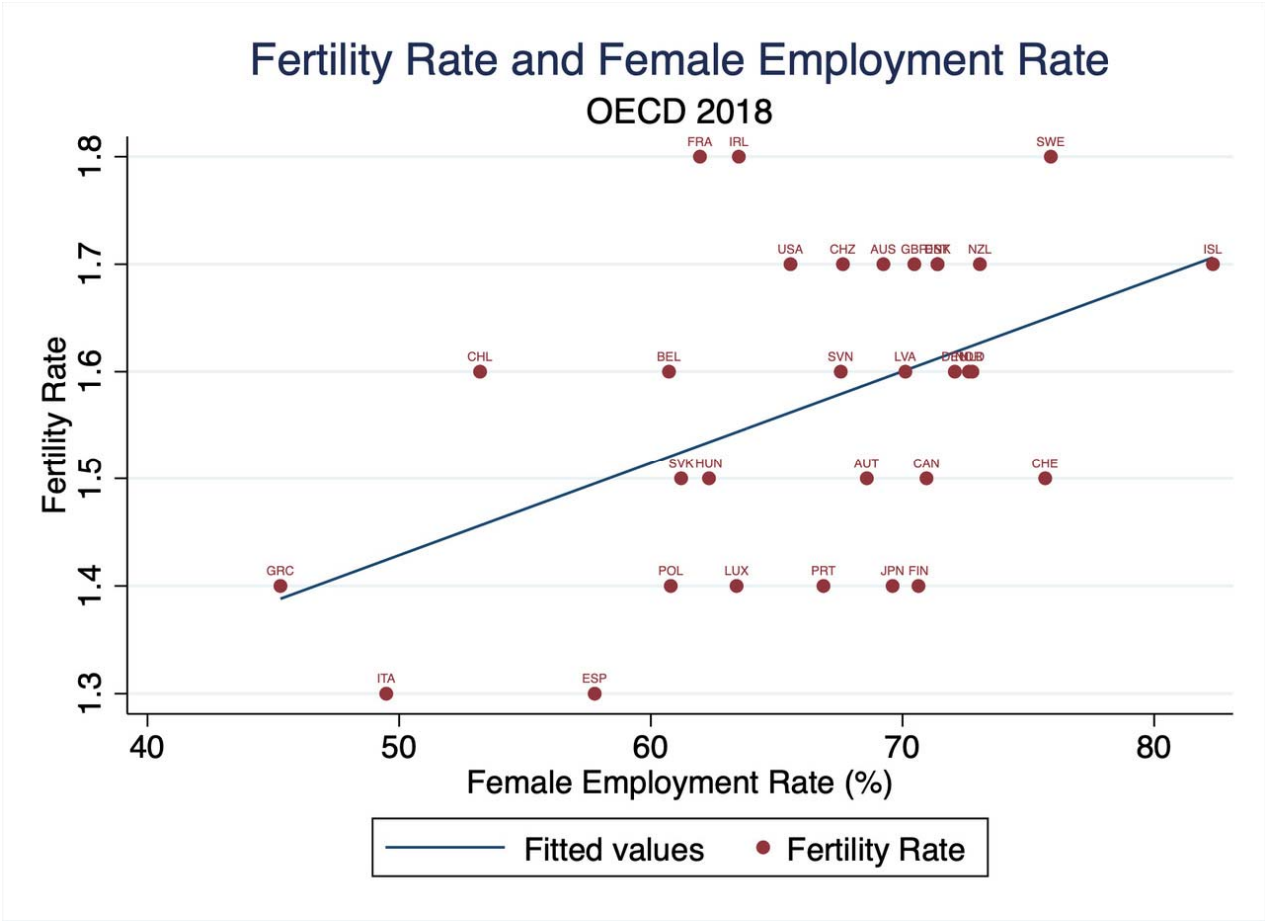
Relevant factors: Culture and Stereotypes

When jobs are scarce, men should have more right to a job than women %Agree
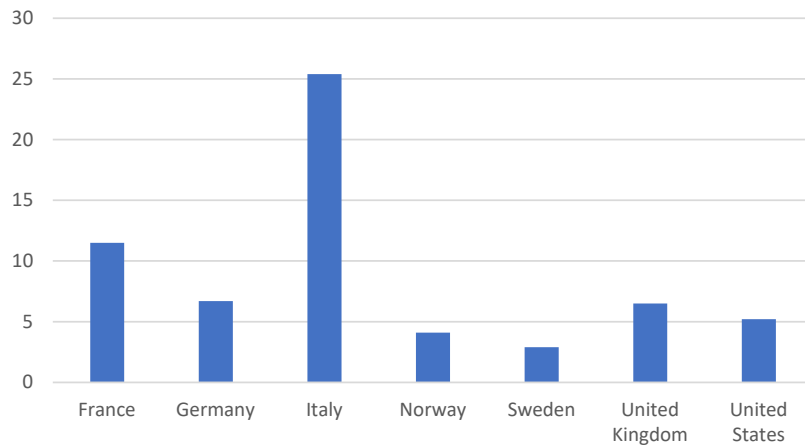
Pre-school child suffers if the mother works

Agree   Disagree
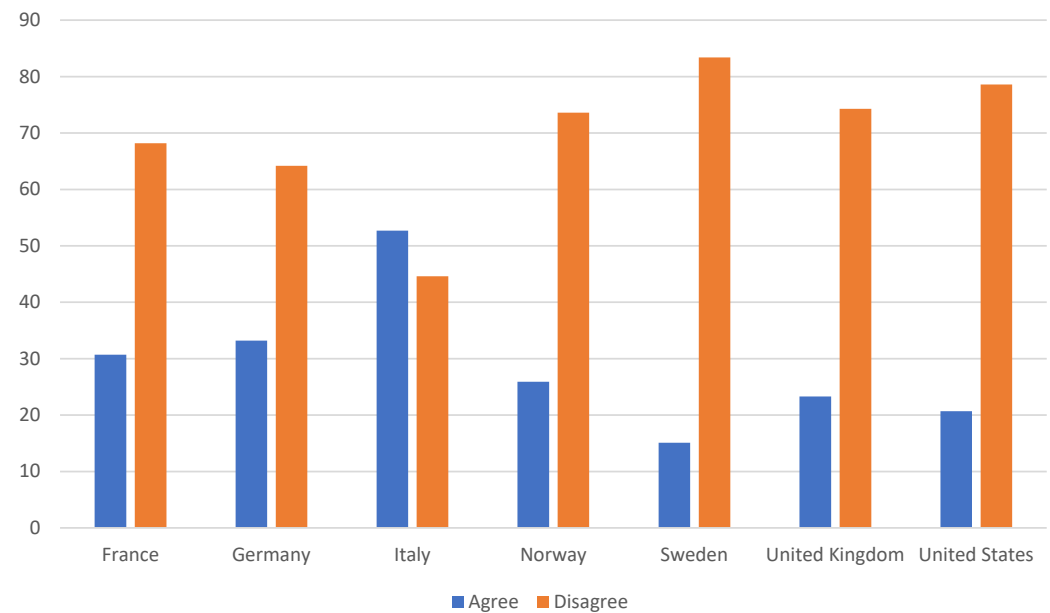
Individuals, Firms, Implicit bias

Culture and STEREOTYPES

Implicit Association between gender and career

Profeta Ronchi Spadavecchia (2022)
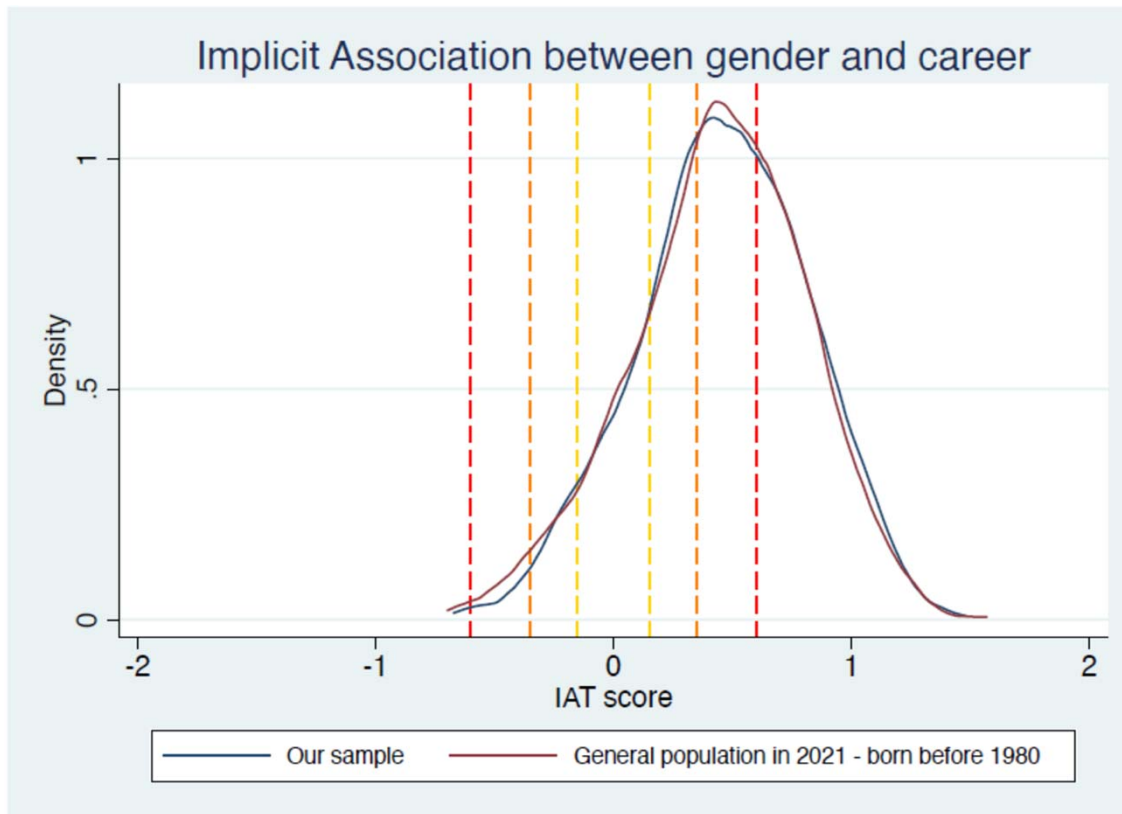
Implicit association between men and career, women and family.

Sample of Italian managers (compared to Italian population).

Negative results: reversed stereotypes;
At 0=no stereotypes.
Positive results: gender stereotypes.
On the left of the red line: strong association, orange: moderate;
yellow: weak.

The role of public policy

- Increasing women's participation to the labor market
  - Maternal, paternal, parental leaves
  - Childcare
- Increasing women's representation
  - Gender Quotas: in business *(Ferraro, Ferrari Profeta, Pronzato Management Science 2021*) and politics *(Baltrunaite, Bello Casarico, Profeta, Savio - Journal of Public Economics 2014)*
  - Electoral rules *(Profeta and Woodhouse, Journal of Comparative Politics, 2021)*
  - Double Preference voting *(Baltrunaite, Casarico, Profeta, Savio - Journal of Public Economics 2019)*

  …..

From Public Policy to gender equality (public channel)

Theoretically, family policies
- support female labour supply if they allow women to remain on the labor market and reduce statistical discrimination
- they may negatively affect labor demand: employers reduce the demand of labor supply of mothers)
- Effects on wages are expected to be negative (it depends on the relative elasticity of D and S). Heterogeneous effects
- They may backfire by reinforcing employers' beliefs and social norms on conservative gender roles

Empirical analysis on OECD countries, 1970-2016

female employment (15-65 years old), employment gap (male minus female), employment of mothers with children under the age of 14 and employment of mothers with small children (0-2 years old).

Maternity, paternity leaves and gender gaps
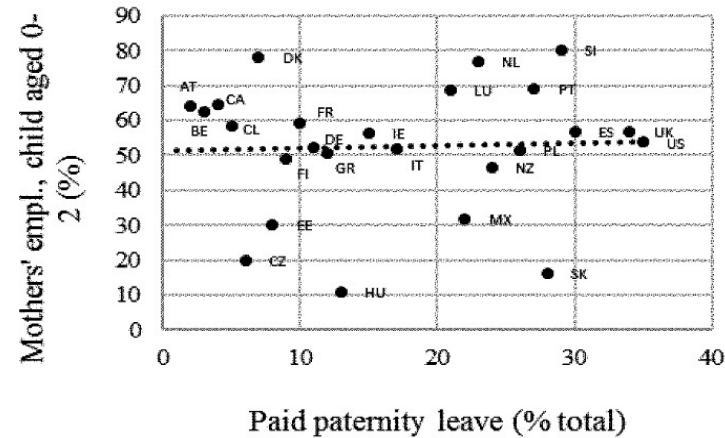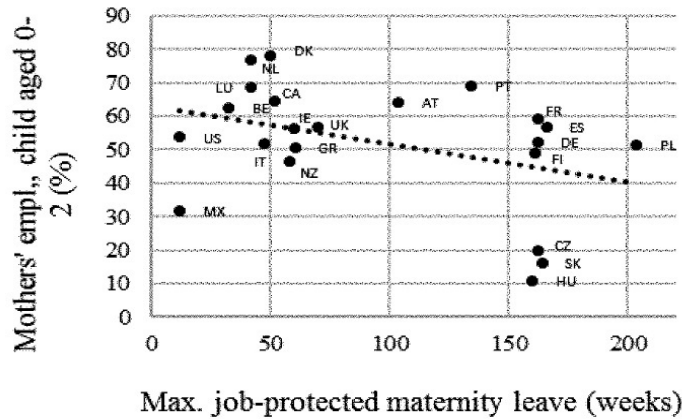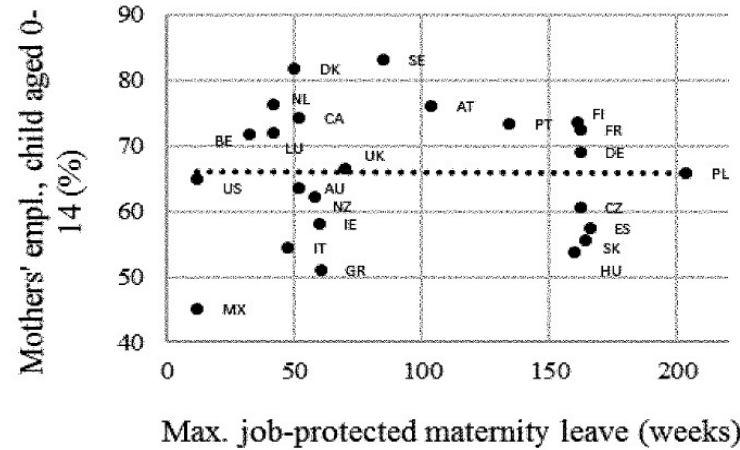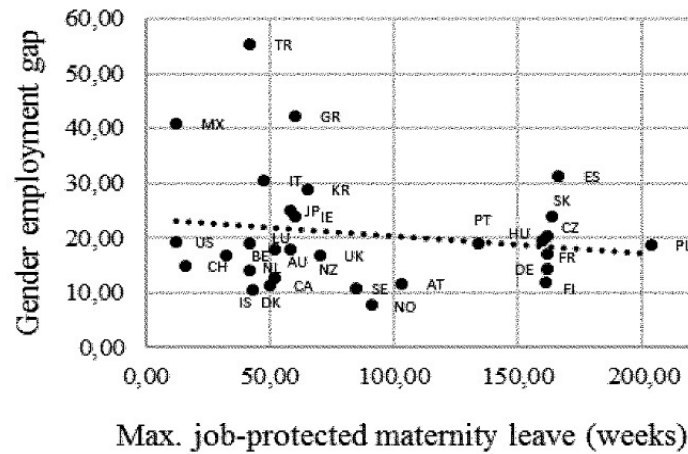
Childcare and gender gaps
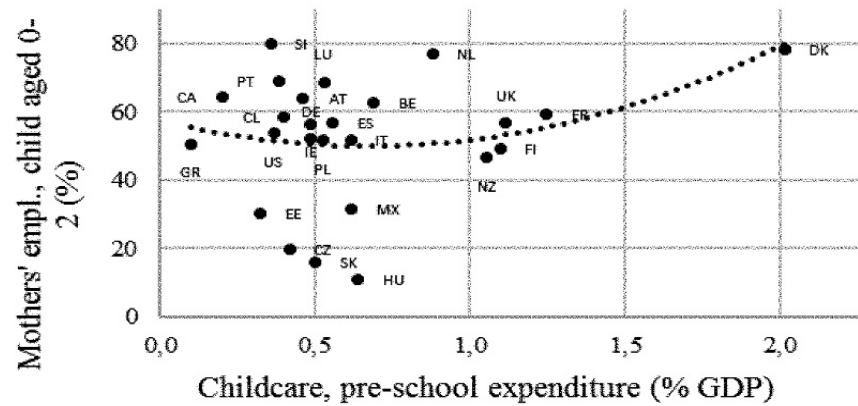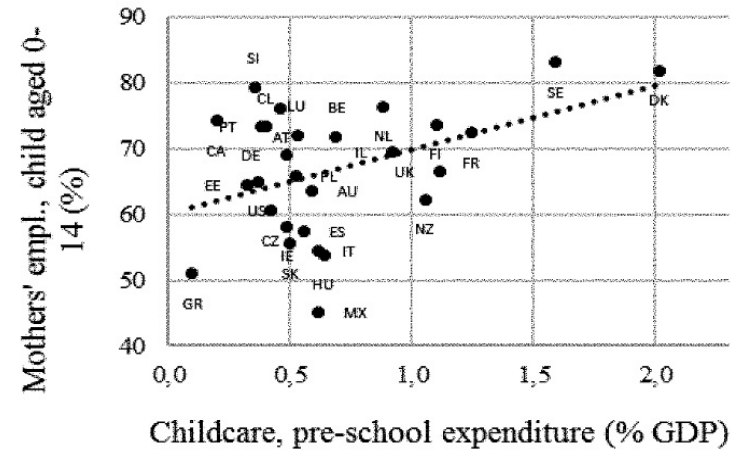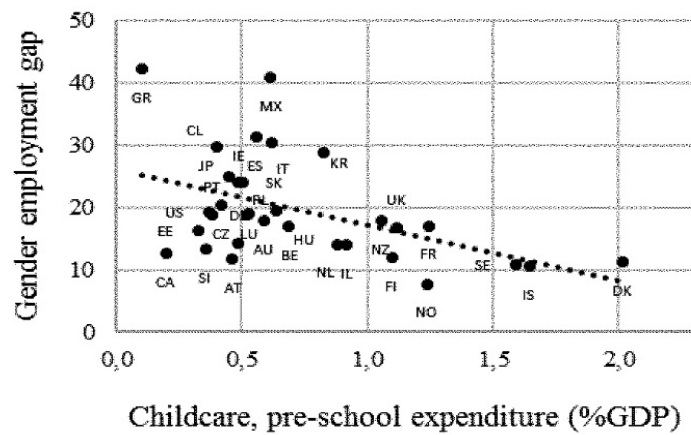
	(1) Fem. Empl. Rate	(2) Fem. Empl. Rate	(3) Empl. Gap	(4) Empl. Gap	(5) Wage Gap	(6) Wage Gap
Max. weeks job-protected leave	0.481*** (0.101)	0.483*** (0.128)	-0.567*** (0.103)	-0.519*** (0.133)	-0.271** (0.112)	-0.377*** (0.106)
Max. weeks squared/100	-0.194*** (0.060)	-0.212*** (0.072)	0.217*** (0.062)	0.211** (0.076)	0.101* (0.059)	0.130*** (0.043)
Percentage of the total paid leave		-0.028 (0.046)		0.014 (0.053)		0.074** (0.031)
Average payment rate		-0.086 (0.065)		0.076 (0.063)		-0.003 (0.029)
Constant	46.77*** (2.452)	52.02*** (4.418)	45.11*** (2.526)	39.76*** (4.593)	31.24*** (3.636)	34.39*** (2.275)
Country FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	1099	685	1099	685	597	320
R^2	0.460	0.490	0.516	0.534	0.309	0.492
Number of countries	30	22	30	22	30	22

Source: Profeta, 2020

	(1) Fem. Empl. Rate	(2) Fem. Empl. Rate	(3) Empl. Gap	(4) Empl. Gap	(5) Wage Gap	(6) Wage Gap
Max. weeks job-protected leave		0.265** (0.109)		-0.254** (0.095)		-0.255*** (0.044)
Max. weeks squared/100		-0.094 (0.060)		0.079 (0.053)		0.083*** (0.025)
Percentage of the total paid leave		-0.101** (0.041)		0.071* (0.041)		0.040 (0.025)
Average payment rate		-0.083* (0.043)		0.057 (0.035)		-0.029 (0.060)
Early childcare expenditure	16.29*** (3.464)	16.78*** (3.342)	-20.06*** (3.644)	-17.59*** (3.706)	-9.869*** (2.018)	-2.868 (1.976)
Constant	58.15*** (1.685)	53.06*** (3.421)	30.63*** (1.772)	37.95*** (2.786)	24.04*** (1.170)	32.54*** (4.560)
Country FE	Y	Y	Y	Y	Y	Y
Year FE	Y	Y	Y	Y	Y	Y
Observations	853	477	853	477	489	255
R^2	0.330	0.560	0.396	0.585	0.305	0.430
Number of countries	34	19	34	19	34	19

Results

- A non-monothonic relationship between the duration of parental leave and female outcomes
  - Positive effects of short leaves, negative of long periods
  - No strong connection between maternity leave and female labor force participation in the long run.
  - Parental leaves delay return to work
- Positive effects of subsidized child care on female employment
- Heterogeneous effects. To be checked benefit for the low skill more than for the high skill
- Multiplier effects: peer effects, spillover, learning, imitation. The impact of the policy may be underestimated

From women's empowerment to public policy (political channel)

Theoretically, women's representation in politics matters

- The identity of politicians matters

- Women may act as role models and culture changes

- Different behavior, agenda, style of leadership

Empirical analysis on OECD countries, 1970-2016

Women in Parliament, childcare and family expenditures
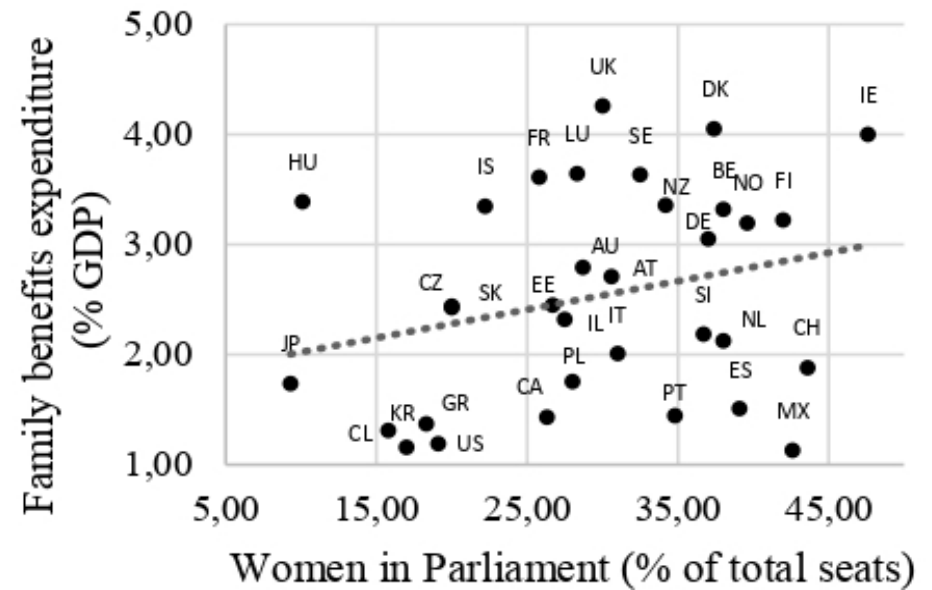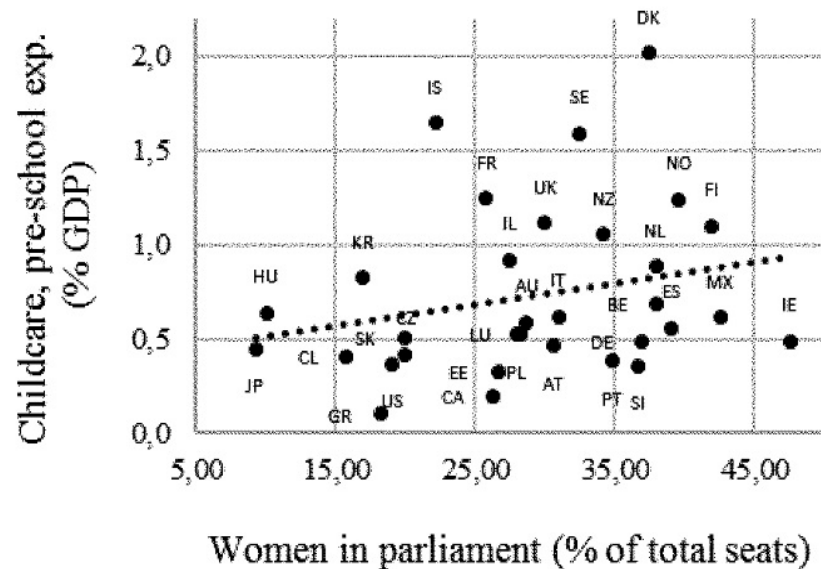
Public spending on families (% of GDP)	(1)	(2)	(3)
Seats held by women in national parliaments (%)	0.0143* (0.00701)	0.0130* (0.00762)	0.0144* (0.00748)
GDP per worker	-5.14e-06 (1.10e-05)		-5.23e-06 (1.13e-05)
Female labor force (%)		0.00139 (0.0156)	
Government gross debt (% GDP)			-0.00158 (0.0149)
Constant	2.598*** (0.917)	2.130*** (0.729)	2.686* (1.332)
Country FE	Y	Y	Y
Year FE	Y	Y	Y
Observations	184	184	184
R^2	0.035	0.030	0.035

Public spending on early childhood education and care (% GDP)	(1)	(2)	(3)
Seats held by women in national parliaments (%)	0.00732* (0.00366)	0.00647** (0.00314)	0.00576* (0.00317)
GDP per worker	1.70e-06 (7.60e-06)		3.22e-06 (6.44e-06)
Female labor force (%)		0.0284** (0.0117)	
Government gross debt (% GDP)			0.0299** (0.0123)
Constant	0.350 (0.597)	-0.983 (0.616)	-1.308* (0.761)
Country FE	Y	Y	Y
Year FE	Y	Y	Y
Observations	195	195	195
R^2	0.056	0.121	0.129

Results

- More women in Parliament, more spending in family and early childcare

- Difficult to claim causality: the endogeneity problem

- How to test causality?
  - Exploit the effects of the introduction of exogenous variations or policy
  - Policy evaluation of the effectiveness of the measures
  - Using different methods of analysis: Difference-in-Differences, Regression Discontinuity Design

Testing the causal link: An example

C.Accettura, P. Profeta (in progress). Gender Differences in Political Budget Cycles

- Do male and female politicians make different decision?
  - On the size and allocation of public spending
- Do male and female have a different style of political leadership /different strategies?
  - Along the political budget cycle:
    - Just prior to an election, incumbents are found to engage in expansionary manoeuvres
    - This can improve chances of reelection
    - But can generate adverse economic effects, which typically result in higher deficit

Gender differences in political budget cycles

- We exploit mixed gender close races for mayors in small Italian municipalities

- We use a Regression Discontinuity Design to show that male mayors who are elected by a small margin against a female opponent are more likely to engage in strategic spending at pre-electoral and electoral years, as compared to female mayors (PBC)

- Result: men use PBC, strategic spending appear for highly visible policies that yield benefits in the immediate: public employment, transportation and road infrastructure, road cleaning and maintenance, waste disposal and green areas (As in the literature)

Institutional setting

- 8,127 municipal administrations in Italy

- Mayors are elected every 5 years. The date of election is exogenous

- The mayor has strong influence on policy-making

- We focus on municipalities with less than 5,000 residents in the period 2002-2017

- At 15,000 the rule for electing the mayor changes from single to dual ballot

- Below 5,000 the municipalities are not subject to the Domestic Stability Pact, a fiscal rule that constrains growth in spending and limits PBC. Mayors are directly elected. They are closer to voters

- Restrict to municipalities with mixed gender elections.

- N=1,551

Regression Discontinuity Design

- We implement a sharp regression discontinuity design with mixed gender closed mayor elections

- A male mayor wins with $MV_{it} > 0$, Formally, assignment to the treatment group is defined as $D_{it} = 1(MV_i > 0)$.

- Margin of victory = share of votes obtained by the male candidate minus the share of votes obtained by the female opponent

- We estimate the outcome of municipality i at year t if led by men or woman: difference $Y_{it}(1) - Y_{it}(0)$

- We adopt a nonparametric approach with linear and quadratic polynomials and use observations between –h and +h (bandwith) with MSE-optimal bandwidth (CCT; see Calonico et al., 2014). Lee and Lemieux, 2014

- Validity
    - Discontinuity in density: McCrary
    - Balance tests
    - Sensitivity to the choice of bandwith

Estimate

- Estimating the treatment effect on outcomes: log of real capital and current expenditures per capita, aggregate and disaggregate level; deficit variation)

- Include year and municipality fixed effects. Include age as control (because of imbalance)

$$Y_{it} = \beta_0 + \beta_1 D_{it} + \beta_2 MV_{it} + \beta_3 D_{it} MV_{it} + \delta_t + \upsilon_{it}$$

- Robust standard errors clustered at the municipality level.

- Bonferroni-correction for multiple testing.

Timing

Figure 1: Electoral calendar

t	$t+1$	$t+2$	$t+3$	$t+4$
• Four years before elections.	• Three years before elections.	• Two years before elections.	• One year before elections.	• Election year.
• The yearly budget was approved the year before by the mayor currently in office for the *first time* in his/her term.	• The yearly budget was approved at t.	• The yearly budget was approved at $t+1$.	• The yearly budget was approved at $t+2$.	• The yearly budget was approved at $t+3$.
• The mayor approves the budget of $t+1$ within Dec., 31st.	• The mayor approves the budget of $t+2$ within Dec., 31st.	• The mayor approves the budget of $t+3$ within Dec., 31st.	• The mayor approves the budget of $t+4$ within Dec., 31st.	
			• That is the *last time* in his/her term the incumbent approves the budget.	

Results: no electoral timing, current exp

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Total		Administration		Social policies		Environment	
Treatment	0.155	0.172*	0.145	0.151	-0.131	-0.060	0.225	0.242
	(0.095)	(0.101)	(0.096)	(0.102)	(0.171)	(0.218)	(0.220)	(0.241)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Observations	9,632	9,632	9,632	9,632	9,632	9,632	9,632	9,632

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Education		Transportation		Culture		Leisure	
Treatment	-0.163	-0.032	0.136	0.137	0.051	0.010	-0.035	-0.029
	(0.142)	(0.168)	(0.072)	(0.084)	(0.348)	(0.379)	(0.306)	(0.341)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Obs.	9,632	9,632	9,632	9,632	9,632	9,632	9,632	9,632

No effect of the gender of the mayor

Results: no electoral timing, capital exp

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Total		Administration		Social policies		Environment	
Treatment	-0.073	-0.172	-0.562	-0.675*	-0.286	0.009	0.304	0.213
	(0.130)	(0.171)	(0.288)	(0.319)	(0.305)	(0.415)	(0.237)	(0.333)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Observations	7,836	7,836	7,836	7,836	7,836	7,836	7,836	7,836

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Education		Transportation		Culture		Leisure	
Treatment	-0.309	-0.393	-0.061	-0.016	0.108	0.603	0.430	-0.182
	(0.393)	(0.469)	(0.293)	(0.335)	(0.290)	(0.421)	(0.301)	(0.477)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Obs.	7,836	7,836	7,836	7,836	7,836	7,836	7,836	7,836

No effect of the gender of the mayor

Results: electoral timing, current exp

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	t		t+1		t+2		t+3		t+4	
Total	0.026	0.049	0.044	0.056	0.117	0.115	0.259*	0.276*	0.277*	0.330*
	(0.079)	(0.098)	(0.076)	(0.089)	(0.083)	(0.086)	(0.144)	(0.154)	(0.160)	(0.188)
Administration	0.033	0.034	0.045	0.054	0.115	0.101	0.239*	0.231	0.271*	0.310*
	(0.082)	(0.098)	(0.078)	(0.092)	(0.083)	(0.090)	(0.138)	(0.168)	(0.153)	(0.176)
Social policies	-0.241*	-0.201	-0.192	-0.176	-0.325	-0.446*	0.247	0.346	-0.307	-0.024
	(0.132)	(0.177)	(0.138)	(0.179)	(0.225)	(0.249)	(0.354)	(0.464)	(0.223)	(0.338)
Environment	0.104	0.088	0.167*	0.170	0.060	0.062	0.334	0.382	0.194	0.419
	(0.098)	(0.115)	(0.091)	(0.105)	(0.218)	(0.256)	(0.376)	(0.460)	(0.414)	(0.519)
Education	-0.235**	-0.138	-0.245**	-0.066	-0.212	-0.168	-0.166	-0.070	0.060	0.151
	(0.119)	(0.146)	(0.115)	(0.151)	(0.142)	(0.167)	(0.174)	(0.238)	(0.177)	(0.213)
Transportation	0.111*	0.106	0.105	0.091	0.115*	0.116	0.128*	0.159**	0.204***	0.220**
	(0.065)	(0.079)	(0.065)	(0.081)	(0.067)	(0.081)	(0.069)	(0.079)	(0.071)	(0.087)
Culture	-0.214	0.254	-0.084	0.186	-0.086	0.059	-0.174	-0.016	0.420	0.338
	(0.276)	(0.404)	(0.302)	(0.413)	(0.316)	(0.415)	(0.333)	(0.433)	(0.370)	(0.402)
Leisure	0.112	0.225	0.110	0.130	0.153	0.235	-0.269	-0.296	-0.336	-0.378
	(0.257)	(0.332)	(0.246)	(0.313)	(0.283)	(0.347)	(0.276)	(0.345)	(0.300)	(0.329)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Observations	1,924	1,924	1,924	1,924	1,924	1,924	1,924	1,924	1,924	1,924

One year before the elections and at the election time male mayors spend on average 25% more for transportation than female ones.

Results: electoral timing, capital exp

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	t		t+1		t+2		t+3		t+4	
Total	0.031	0.084	-0.078	-0.175	-0.271	-0.418*	0.211	0.094	-0.257	-0.387
	(0.147)	(0.184)	(0.152)	(0.199)	(0.178)	(0.217)	(0.172)	(0.227)	(0.228)	(0.298)
Administration	-0.684	-0.755	-0.938*	-1.301*	-0.754	-0.788	-0.199	-0.251	-0.463	-0.324
	(0.450)	(0.503)	(0.412)	(0.590)	(0.439)	(0.558)	(0.470)	(0.540)	(0.481)	(0.553)
Social policies	-0.042	0.193	-0.808*	-0.197	-0.549	-0.707	0.327	1.089	-0.219	-0.270
	(0.508)	(0.663)	(0.484)	(0.693)	(0.506)	(0.704)	(0.481)	(0.700)	(0.410)	(0.492)
Environment	-0.045	-0.180	-0.059	-0.128	0.127	0.085	0.915***	0.947**	0.478	0.509
	(0.365)	(0.465)	(0.390)	(0.458)	(0.383)	(0.517)	(0.297)	(0.339)	(0.471)	(0.603)
Education	-0.014	-0.123	-0.195	-0.674	-0.108	-0.155	-0.575	-0.699	-0.130	-1.100
	(0.535)	(0.629)	(0.497)	(0.736)	(0.547)	(0.682)	(0.521)	(0.641)	(0.506)	(0.746)
Transportation	0.247	-0.198	-0.007	0.029	0.061	0.150	0.217	0.327	-0.741	-0.709
	(0.361)	(0.533)	(0.456)	(0.548)	(0.460)	(0.603)	(0.544)	(0.668)	(0.538)	(0.621)
Culture	0.167	0.765	0.182	0.824	0.038	0.408	0.092	0.015	0.274	0.775
	(0.378)	(0.495)	(0.349)	(0.518)	(0.388)	(0.497)	(0.422)	(0.464)	(0.383)	(0.527)
Leisure	0.239	0.171	-0.299	-0.403	-0.268	-0.860	1.363**	0.750	0.506	0.107
	(0.681)	(0.771)	(0.699)	(0.806)	(0.664)	(0.858)	(0.531)	(0.764)	(0.576)	(0.729)
Polynomial	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic	Linear	Quadratic
Observations	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566	1,566

One year before the elections and at the election time male mayors more than double the investment in Environment (parks, green areas and waste disposal)

Why do we care: Gender Equality

- Women's participation to the labor force increases GDP (*+11% in Italy*)
- Female employment rates are positively related to fertility
- Women's participation to the labor force is positively related to economic growth and development (direct and indirect effects)
- Women's participation to the labour market may counterbalance the aging process
- At the individual and family level
  - reduces risks (in jobs, family relationships…..)
  - increases income
  - reduces poverty
  - Increases well-being

Goal 5.UN Sustainable Development:

Achieve gender equality and empower all women and girls

Economic growth

- In countries with an initial low gender equality the gain is higher
- It may reach 12% in 2050

Impact of gender equality in the GDP of EU Member States in 2030

★★★ High impact
ⓘ

★★ Medium impact
ⓘ

★ Low impact
ⓘ

Eige, 2022
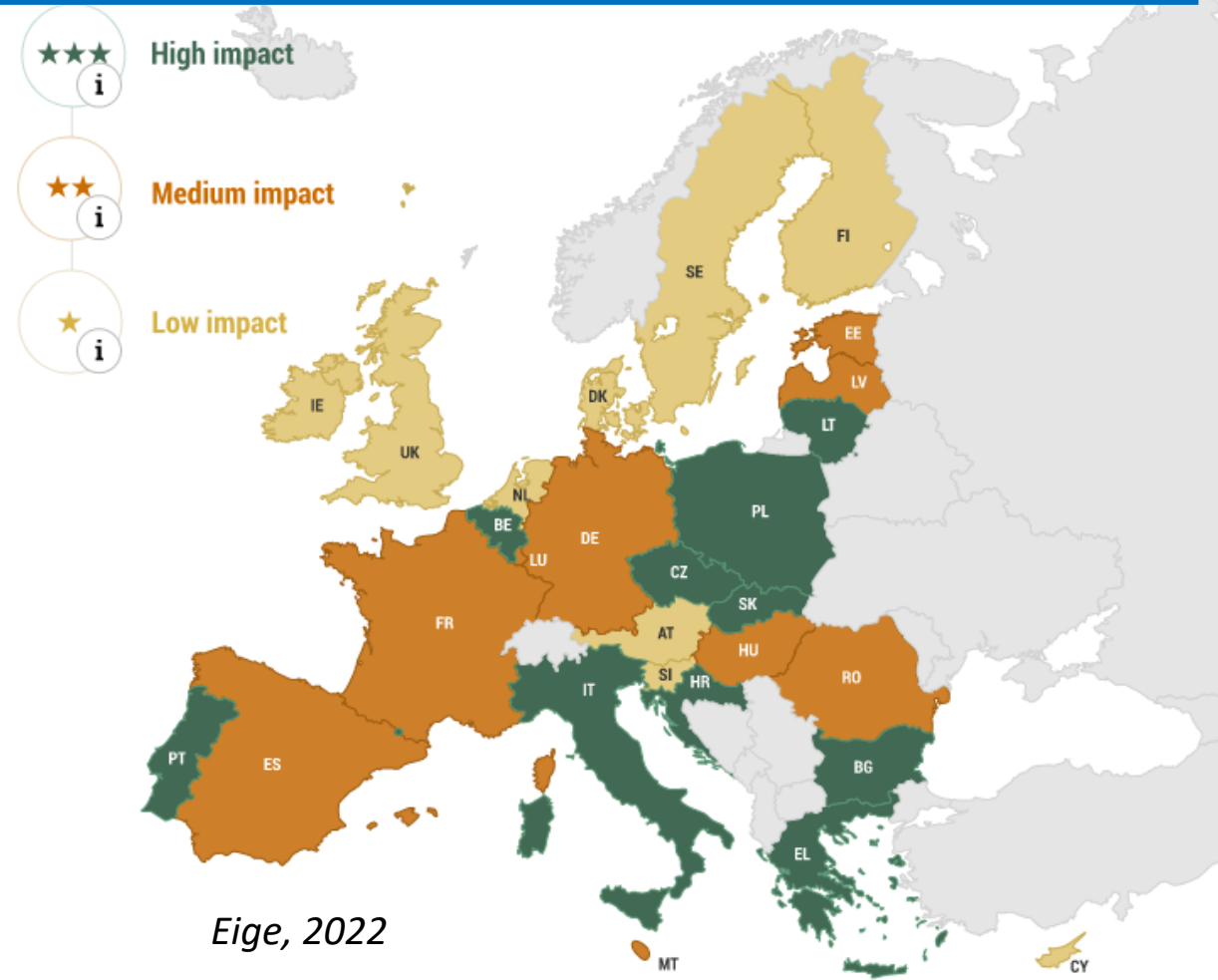
Women's empowerment

Selection

- Better quality
- Men and women are better selected
- Incentives for other women

Performance and Agenda

- Firms's performance (profits, returns…)
- Sustainable growth
- A different agenda in public policies

Leadership style

- Democratic style of leadership
- Interpersonal orientation
- Future-oriented
- Innovation

Women's traits

- Risk aversion
- Moderate Competition
- Negotiation
- Altruism
- Long-term horizon
- Focused Networking

The impact of Covid-19 on women's work

- The She-cession: Are women more affected than men by the pandemic on the labor market?
  - Sectors of activity: women are employed in the service sector, strongly hit by the pandemic. Different from 2007 crisis, which hit finance and industry, male-dominated sectors, and thus was a <u>Man-cession</u>.
  - Family responsibilities during the lockdown have increased. Are they equally shared?

Two Hypotheses

With the lockdown and the new organization of work (flexible work)

- Men are more exposed to family and care duties
  - Less traditional gender roles, more sharing, lower gender gaps

Smart-working increases men's involvement in household and care activities: a pre-Covid study by Paola Profeta with M. Angelici

- Men are more involved, but also women
  - The care gap remains, gender gaps are exacerbated

More equal sharing at home reduces gender gaps in the labor market (Profeta and Fanelli, Demography 2021)

Short versus long-run effects? An empirical question
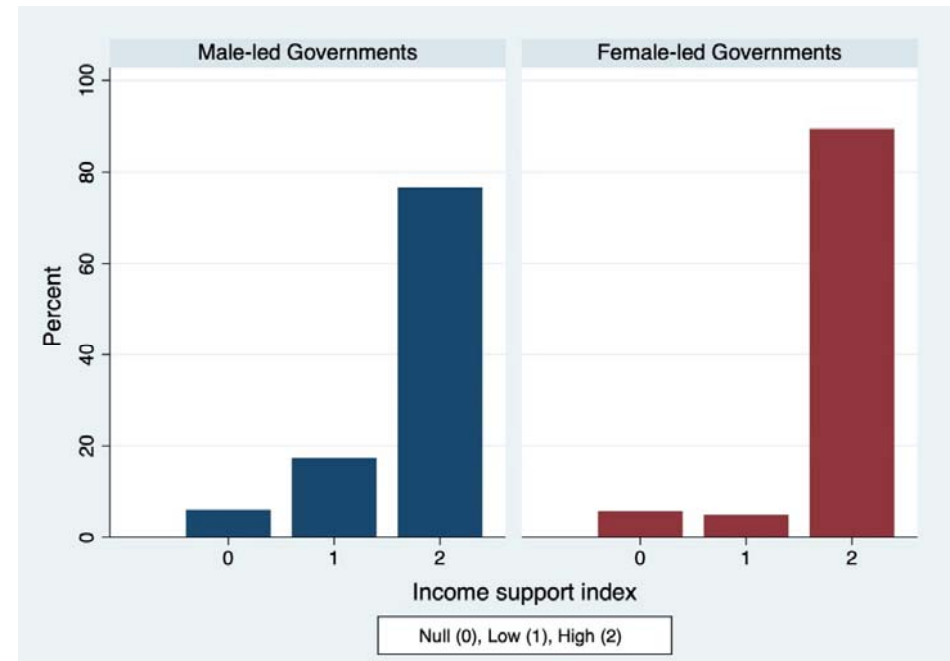
Results: Women's housework and childcare during COVID-19
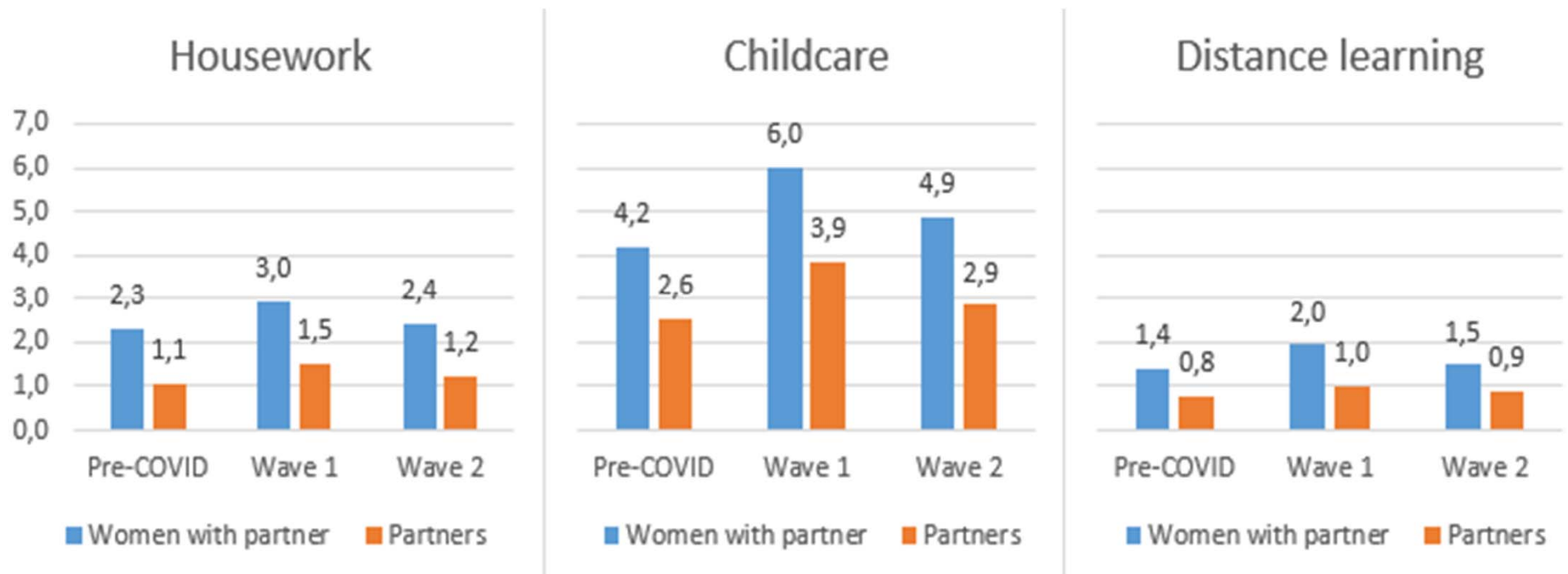
Del Boca et al. (2021)

Female leadership during the pandemic
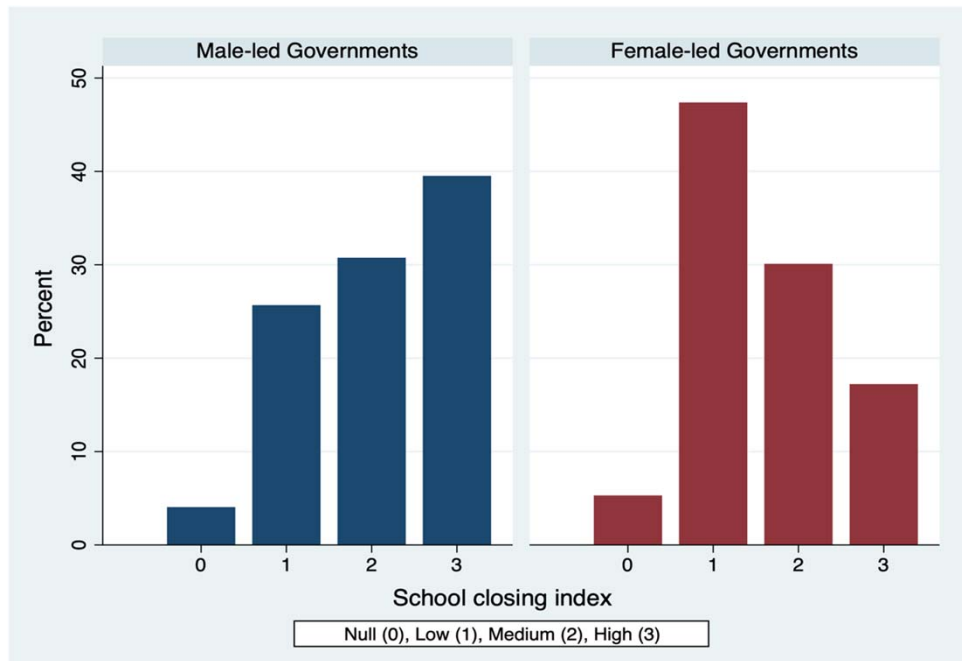
0 = no measures; 1 = recommend closing or all schools open with alterations resulting in significant different compared to non-COVID-19; 2 = require closing of some levels or categories; 3 = require closing all levels.

0 = no income support; 1= government is replacing less than 50% of lost salary (flat sum lower than half the median salary); 2= government is replacing 50% or more of lost salary (flat sum equal to or higher than half the median salary).

Source: Elaboration on "Oxford Coronavirus Response Tracker" (OxCGRT)

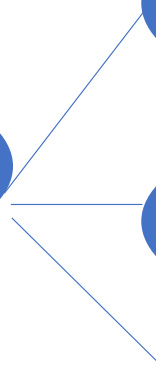# Conclusions: Gender Equality and Public Policy