EC4170:Political Economy

Nicola Mastrorocco

Trinity College Dublin - Department of Economics

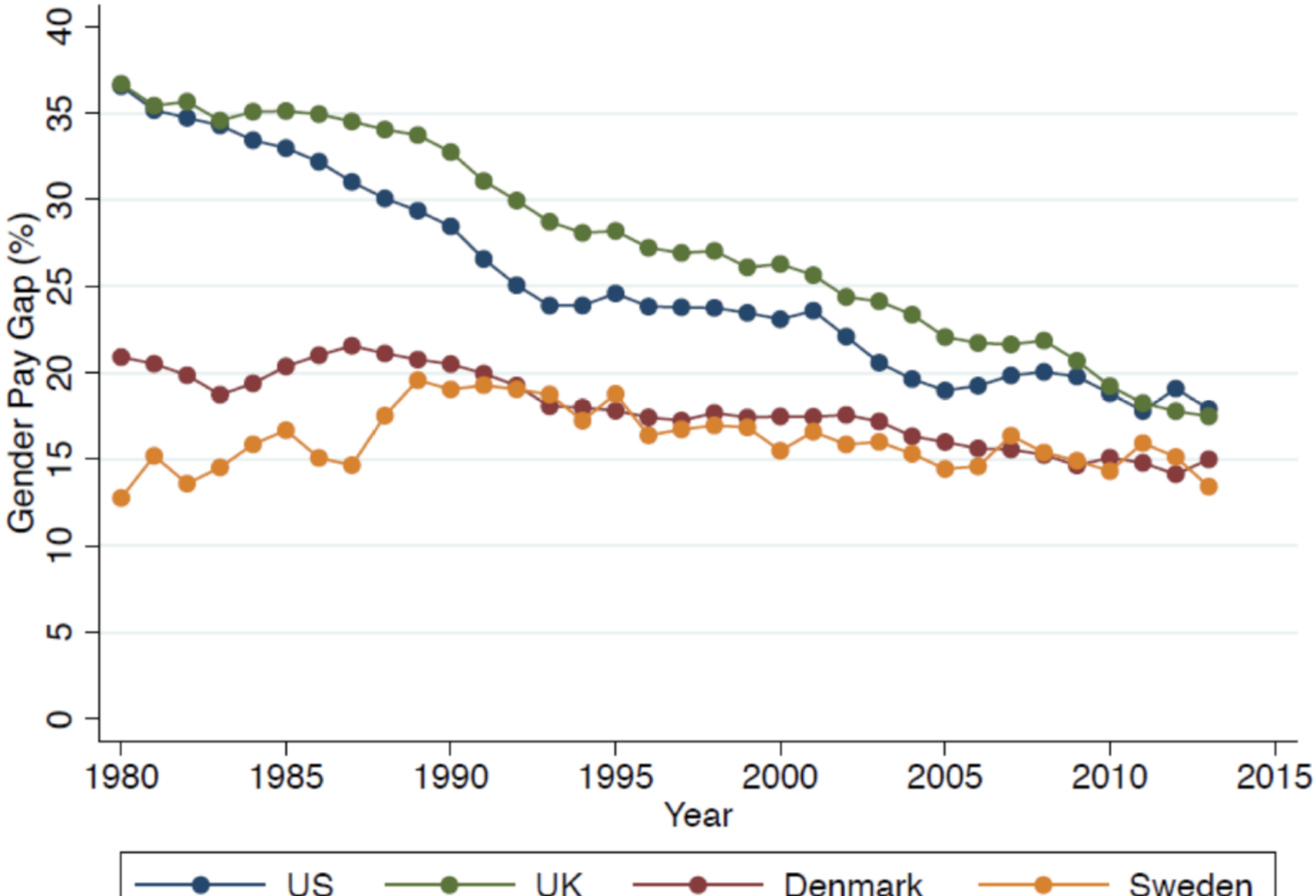
Monday 26th February 2019

Outline

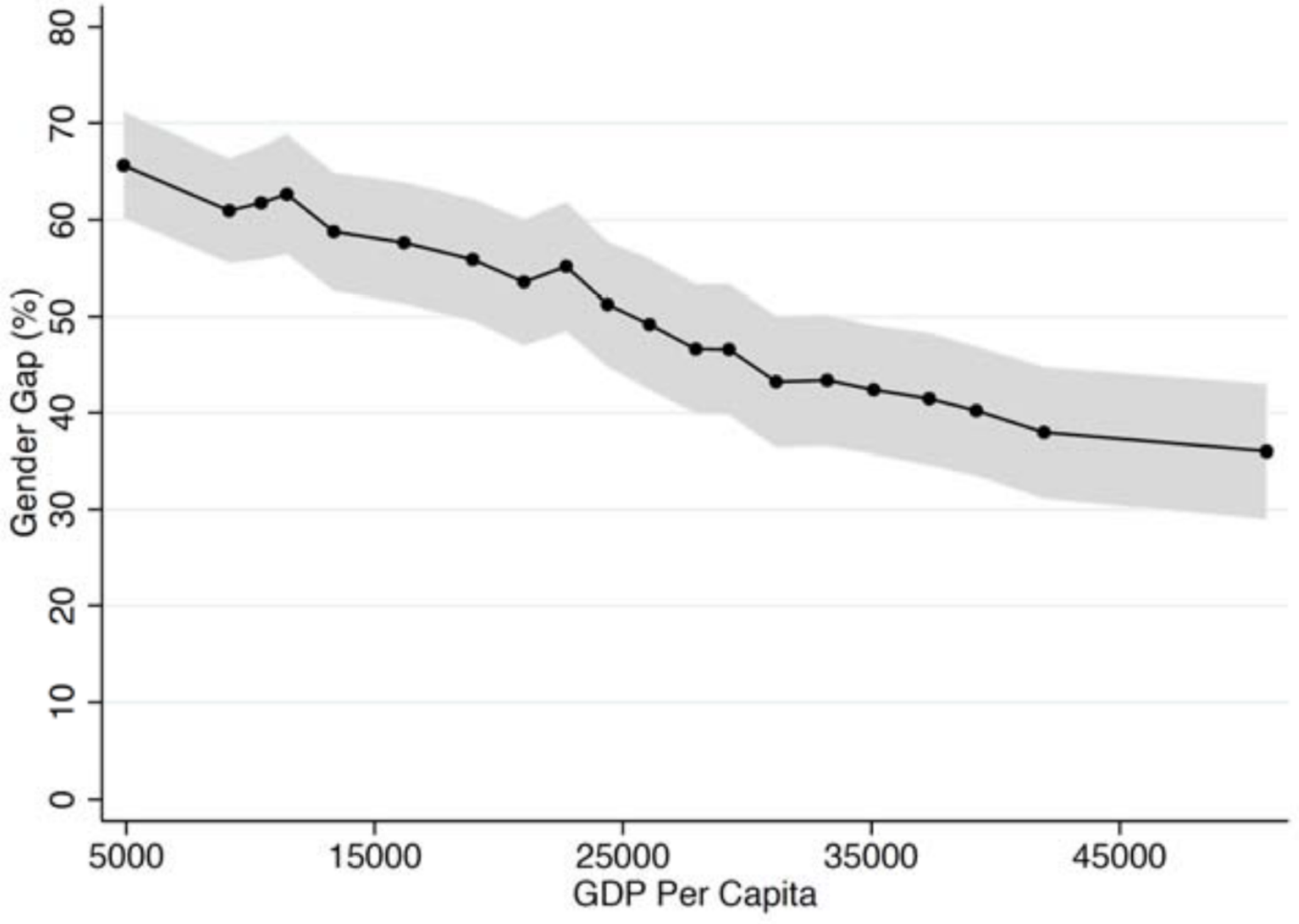
1. *Facts About Gender Inequality*
2. *Drivers of Gender Inequality*
3. *Impact of Children/Parenthood*
4. *Public Policies*
    1. *Parental leave (maternity vs paternity)*
    2. *Childcare Subsidies*

Facts About Gender Inequality

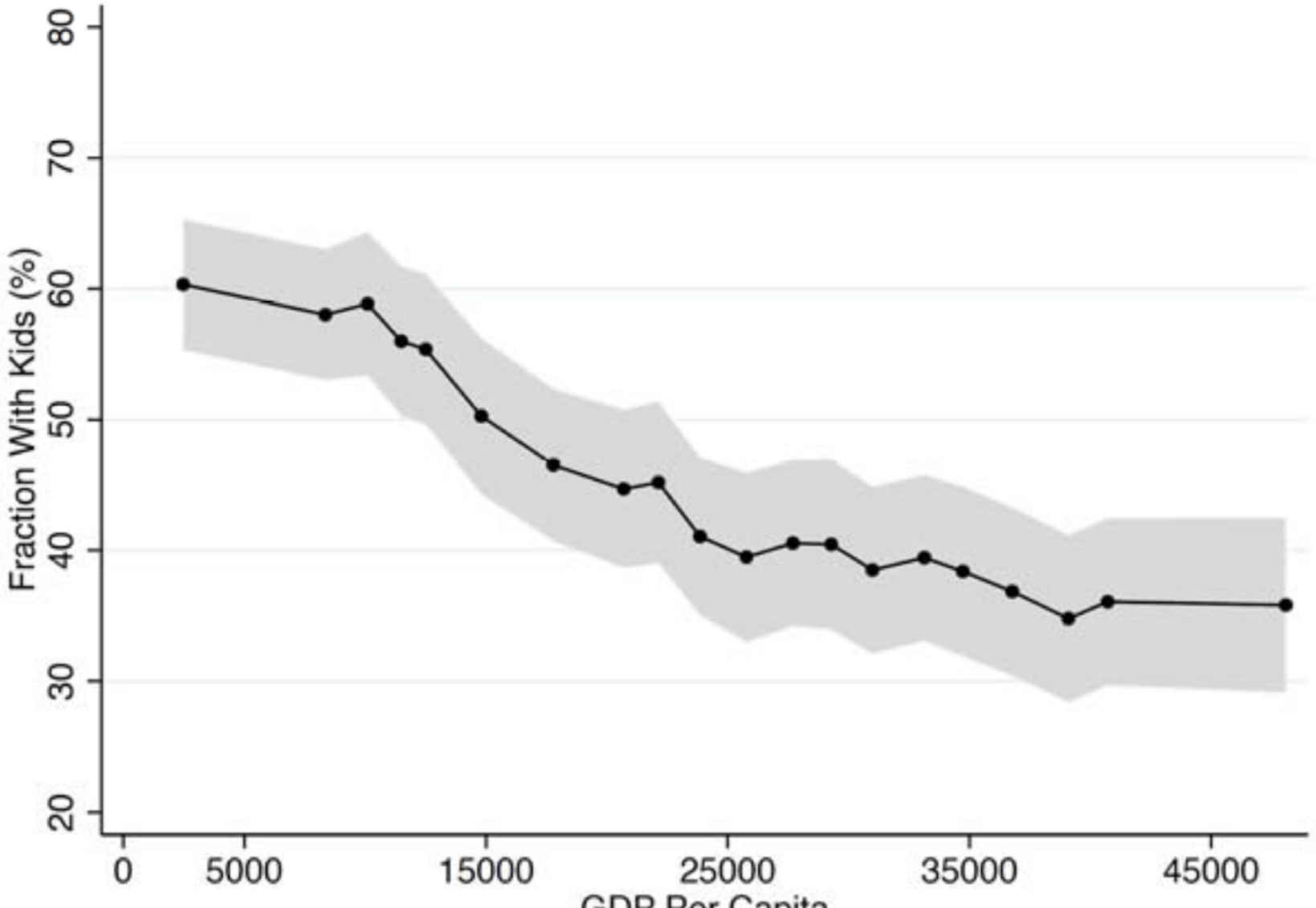
Gender Gap in (Full-Time) Earnings Across Countries Over Time



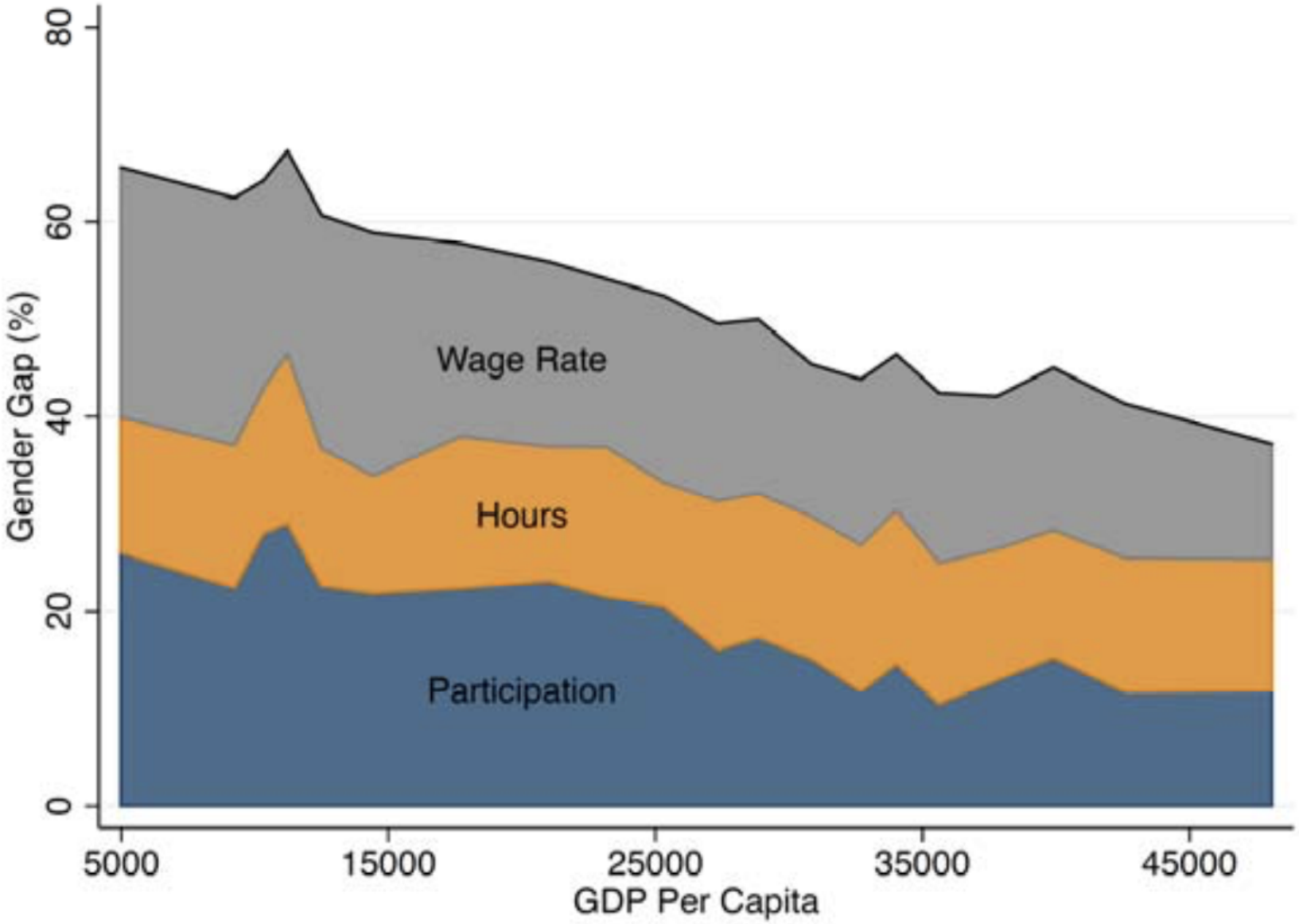
Gender Gap in Earnings Across Development (53 Countries)



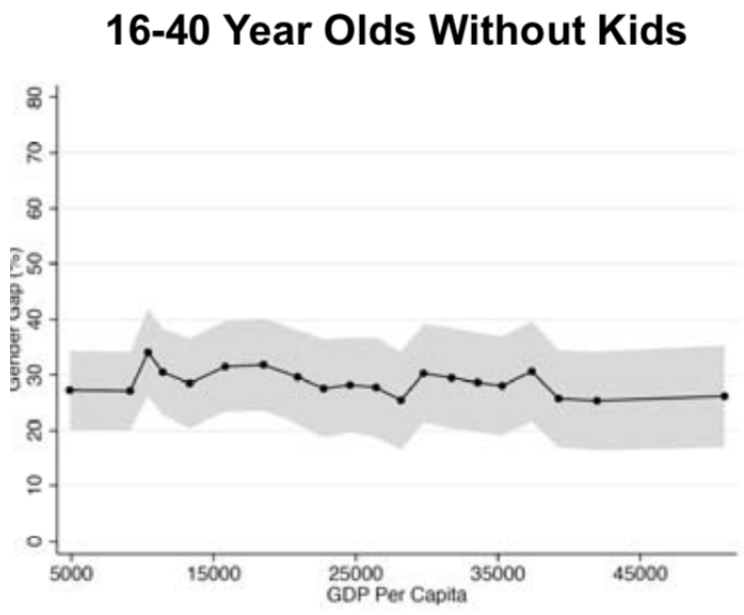
Demographic Transition: Fraction With Children (16-40 Year Olds)

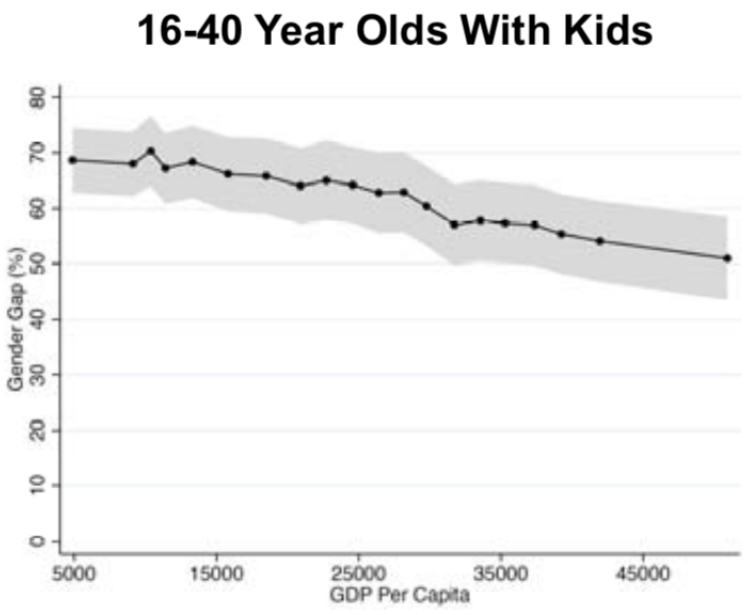


Gender Gap in Earnings: Labor Supply vs Wage Rates

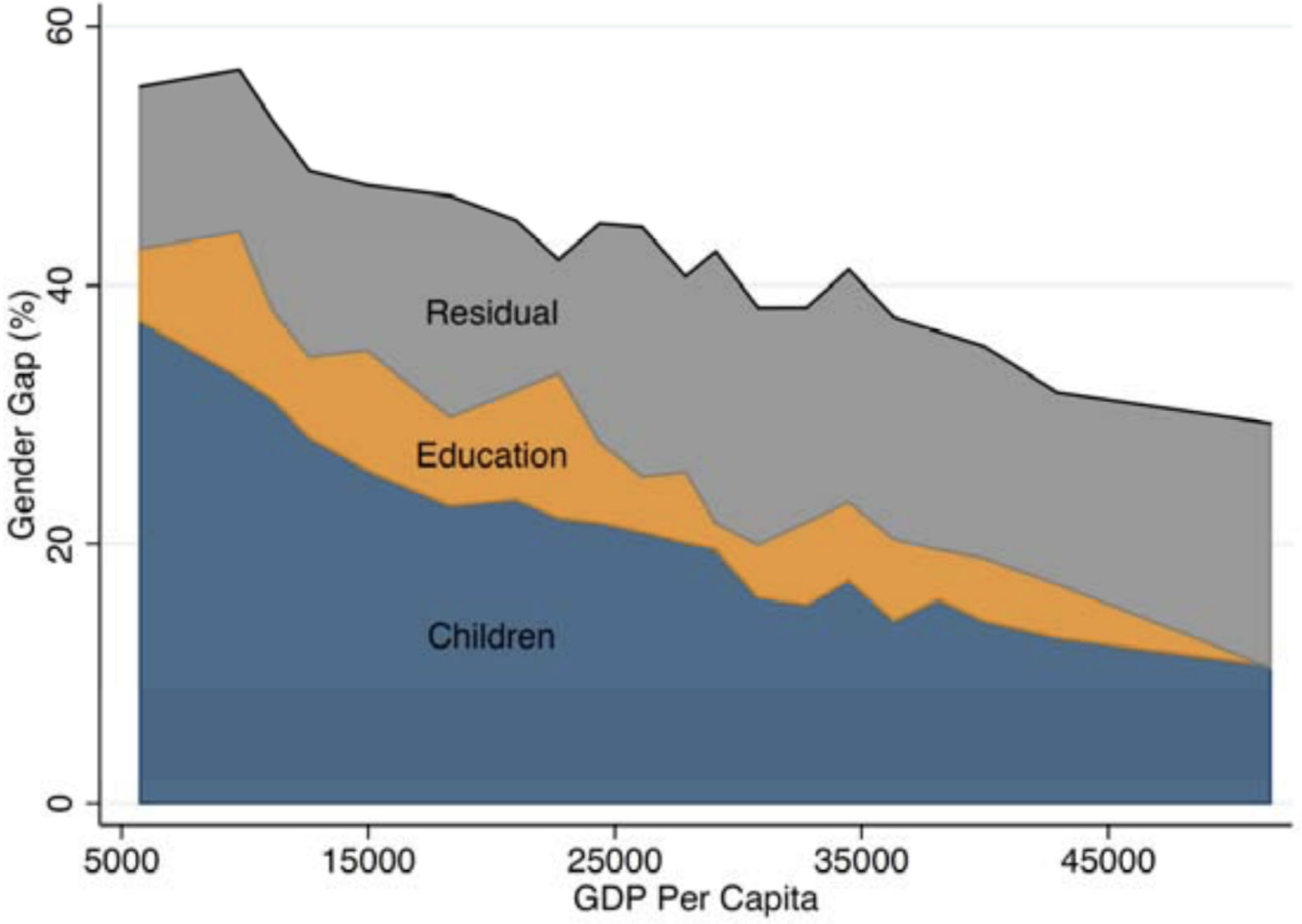


Gender Gap in Earnings: Role of Children





Gender Gap in Earnings: Fertility vs Education



This Decomposition is Correlational, Not Causal

- Children and relative female education are correlated with the gender gap
  - Fertility declines and female education rises over the development path
- These correlations are not necessarily causal:
  - Correlations in the cross-section and over time may reflect omitted variables and reverse causation

Drivers of Gender Inequality

What Drives Gender Inequality?

1. **Children/parenthood**
2. **Human capital (Education)**
3. **Occupation**
4. **Discrimination**
5. **Social Norms (Norms)**

Impact of Children/Parenthood: Event Study Approach

Kleven et al. (2016): Danish Data & Approach

- Full-population administrative data from 1980-2013
- Rich information on demographics, labor market outcomes, education, tax, etc.
- Link family members, generations, workers & firms
- **Event studies of child births**
  - First child births between 1985-2003
  - Parents observed in 15-year window around birth
  - Around 0.5 million births, 15 million parent-year obs

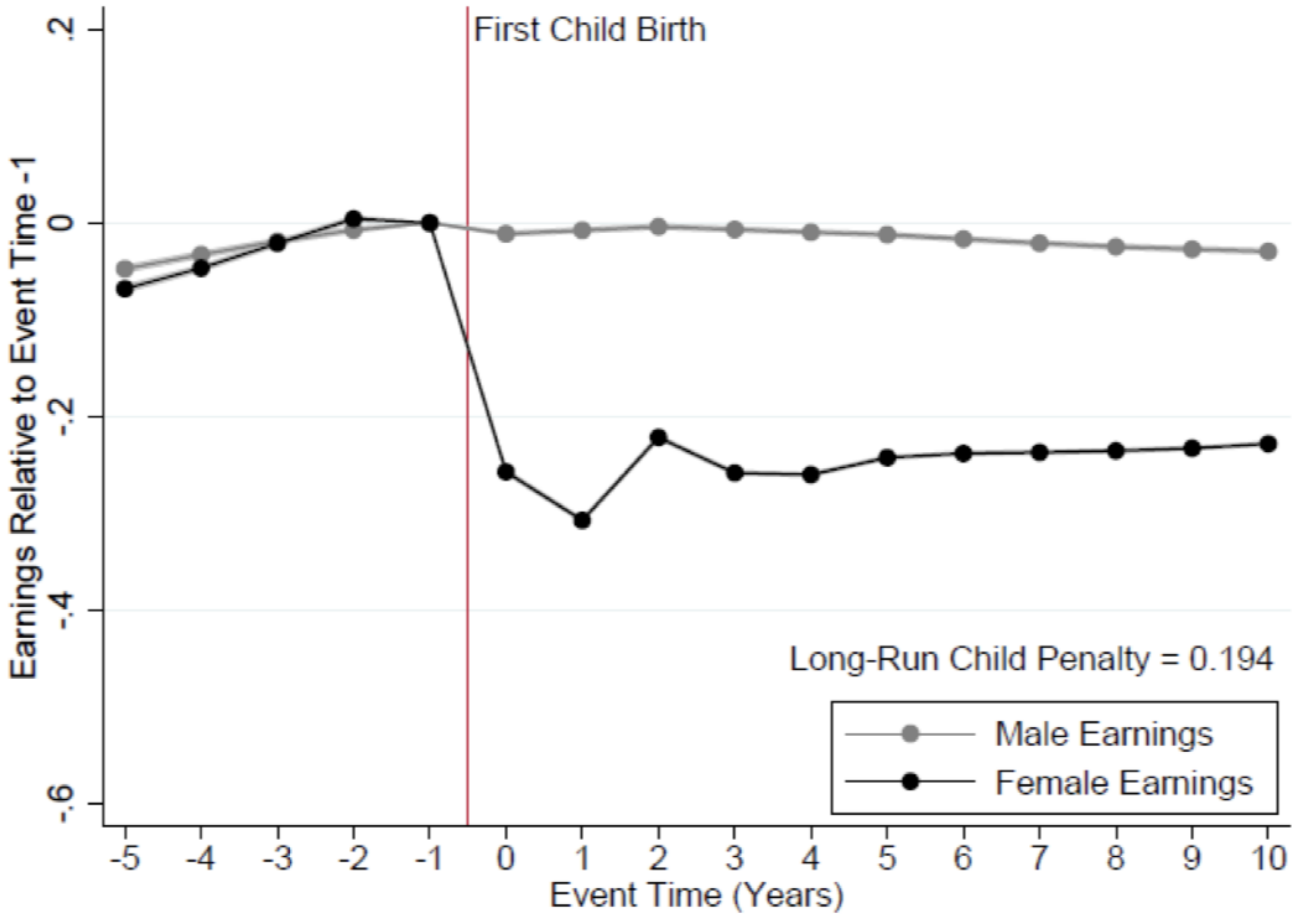
Kleven et al. (2016): Event Study Approach

- Define event time: time of first child birth is $t = 0$
- Look for sharp changes in outcomes of women relative to men around $t = 0$
- For men and women separately, regress

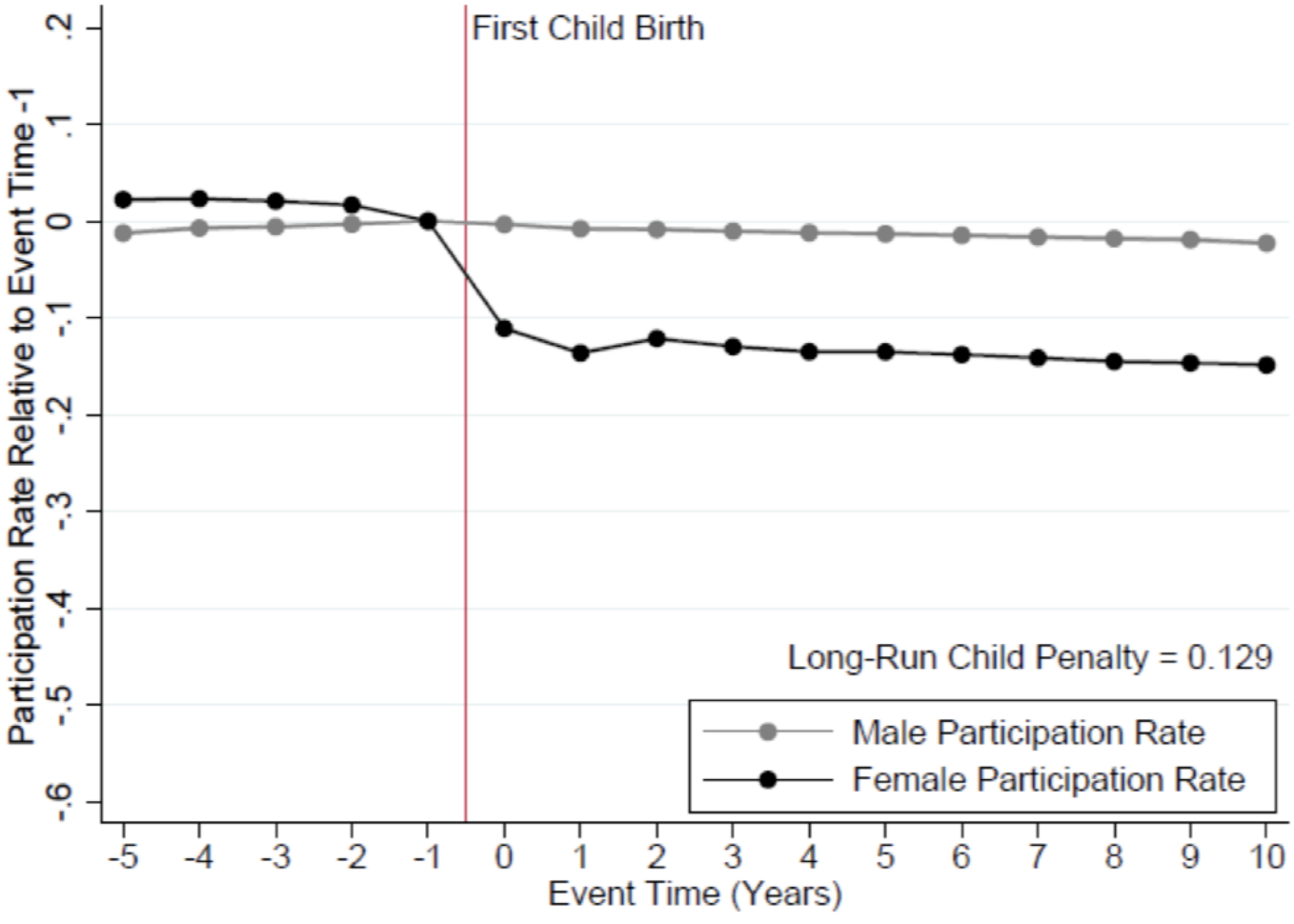
$$Y_{it}^{g} = \sum_{t \neq -1} \alpha_t^g \cdot EVENT_{it} + \text{age/year dummies}$$

- Child penalty $P_t \equiv \frac{\hat{\alpha}_t^m - \hat{\alpha}_t^w}{\mathrm{E}[\tilde{Y}_{it}^w | t]}$ is the percentage by which women fall behind men due to children at event time t

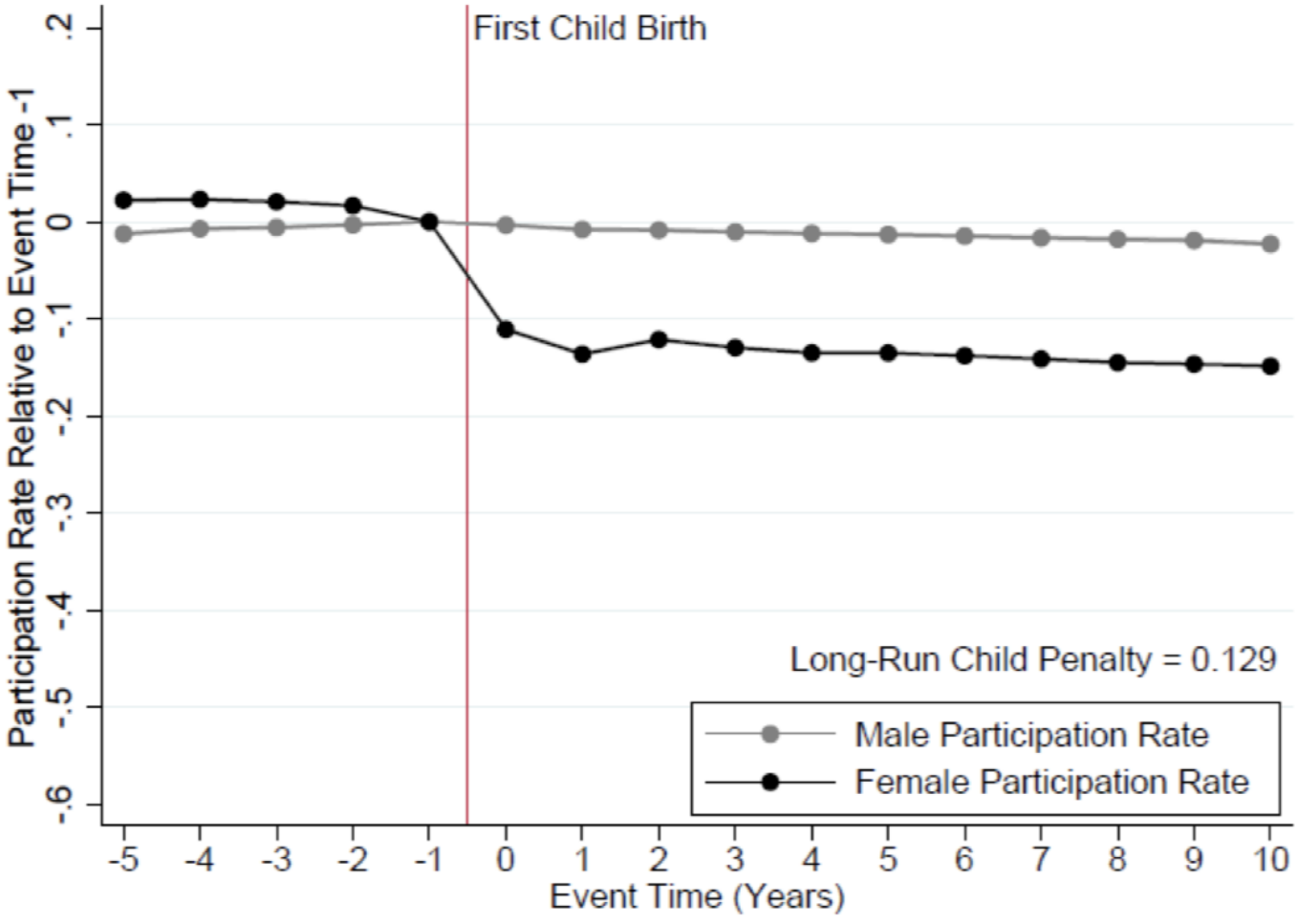
Impact of Children on Earnings



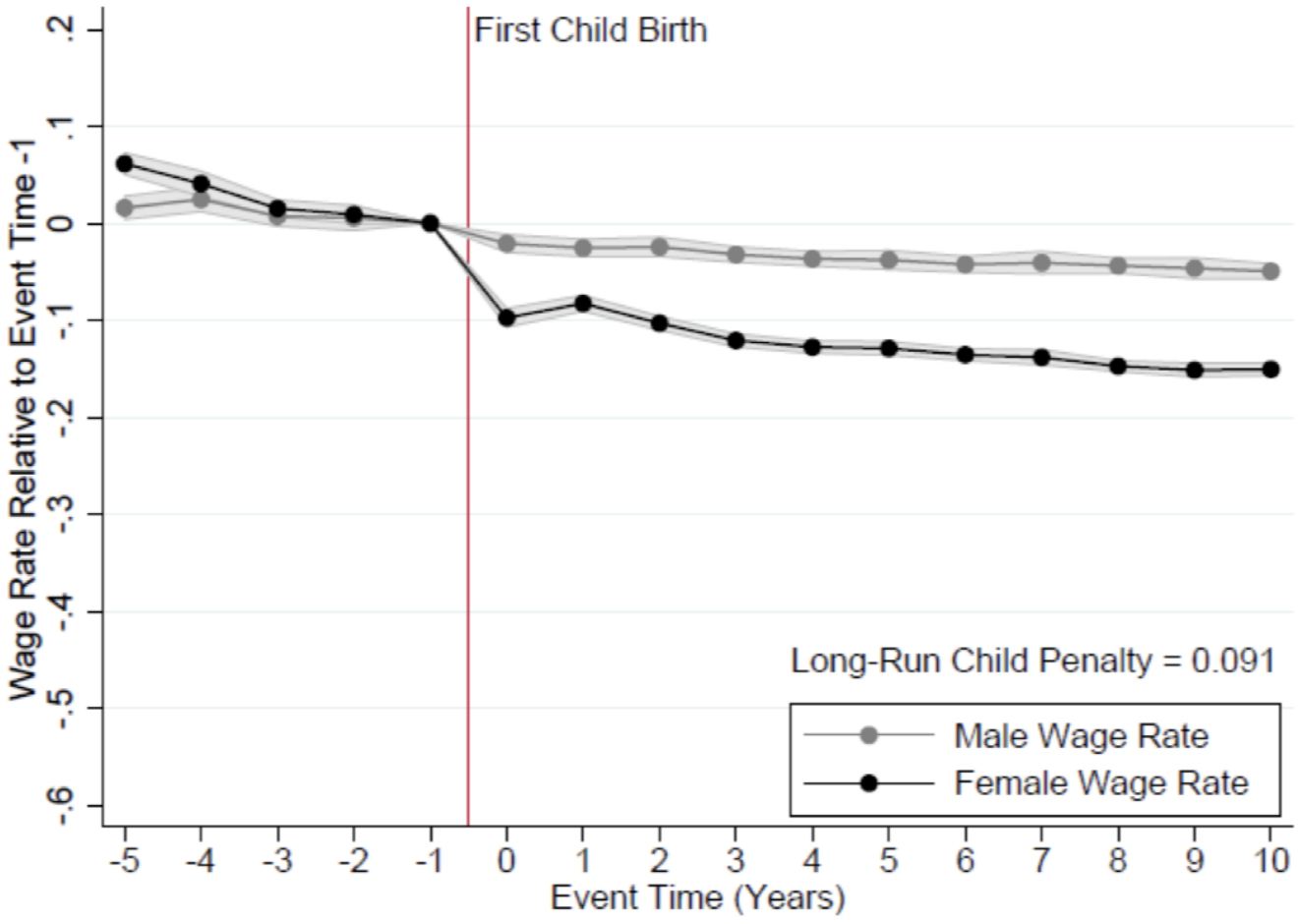
Impact of Children on Hours Worked



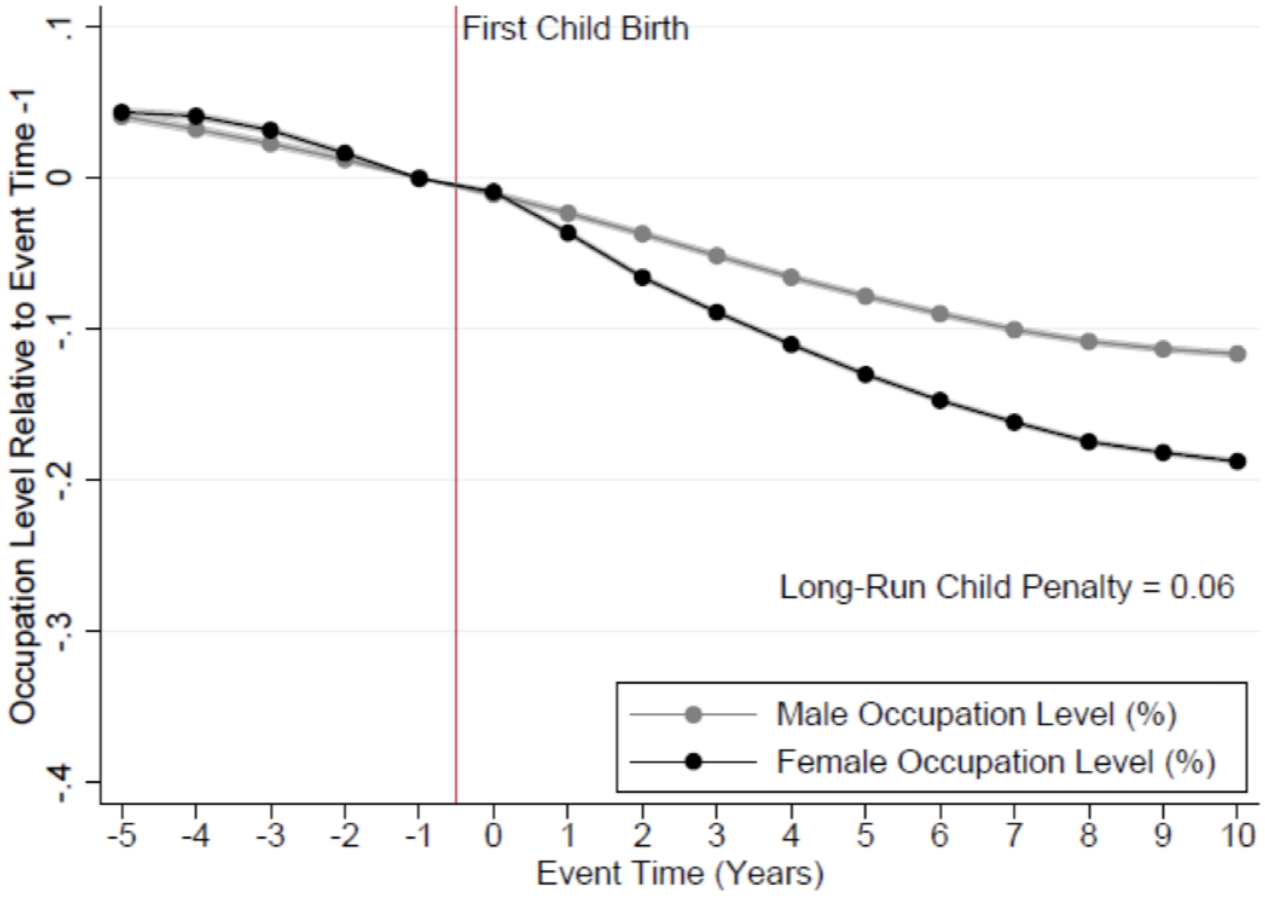
Impact of Children on Participation



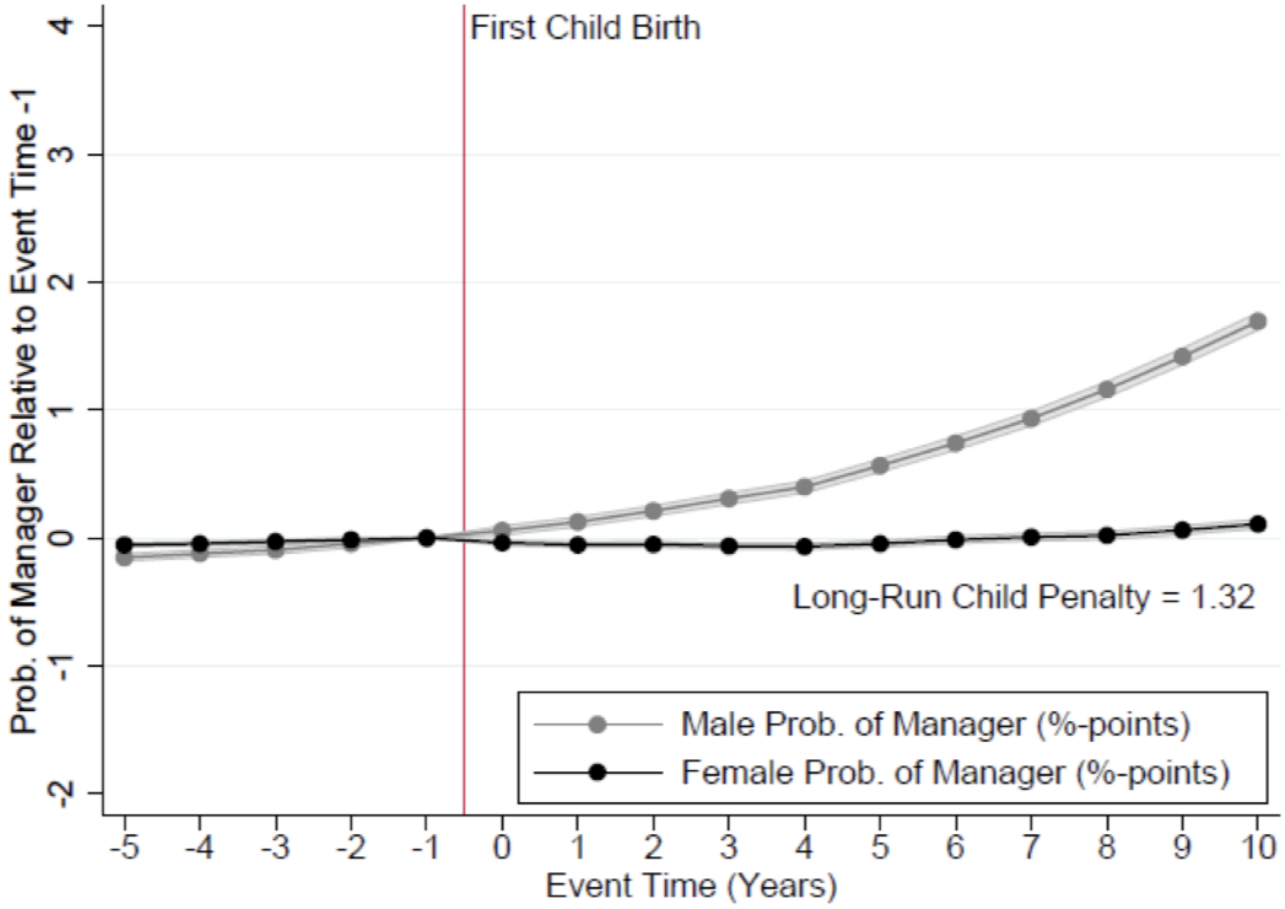
Impact of Children on Wage Rates



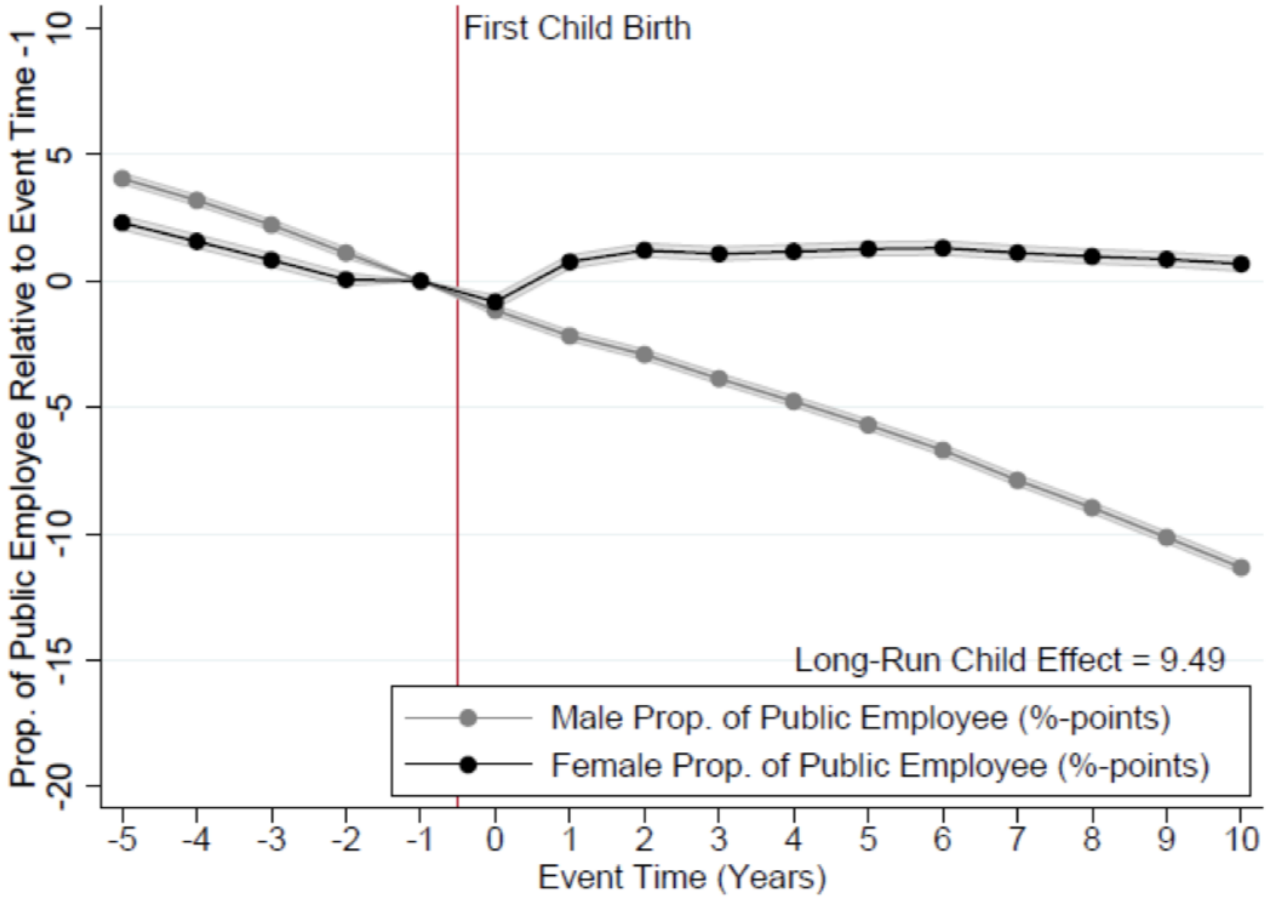
Anatomy of Child Impacts: Occupational Rank



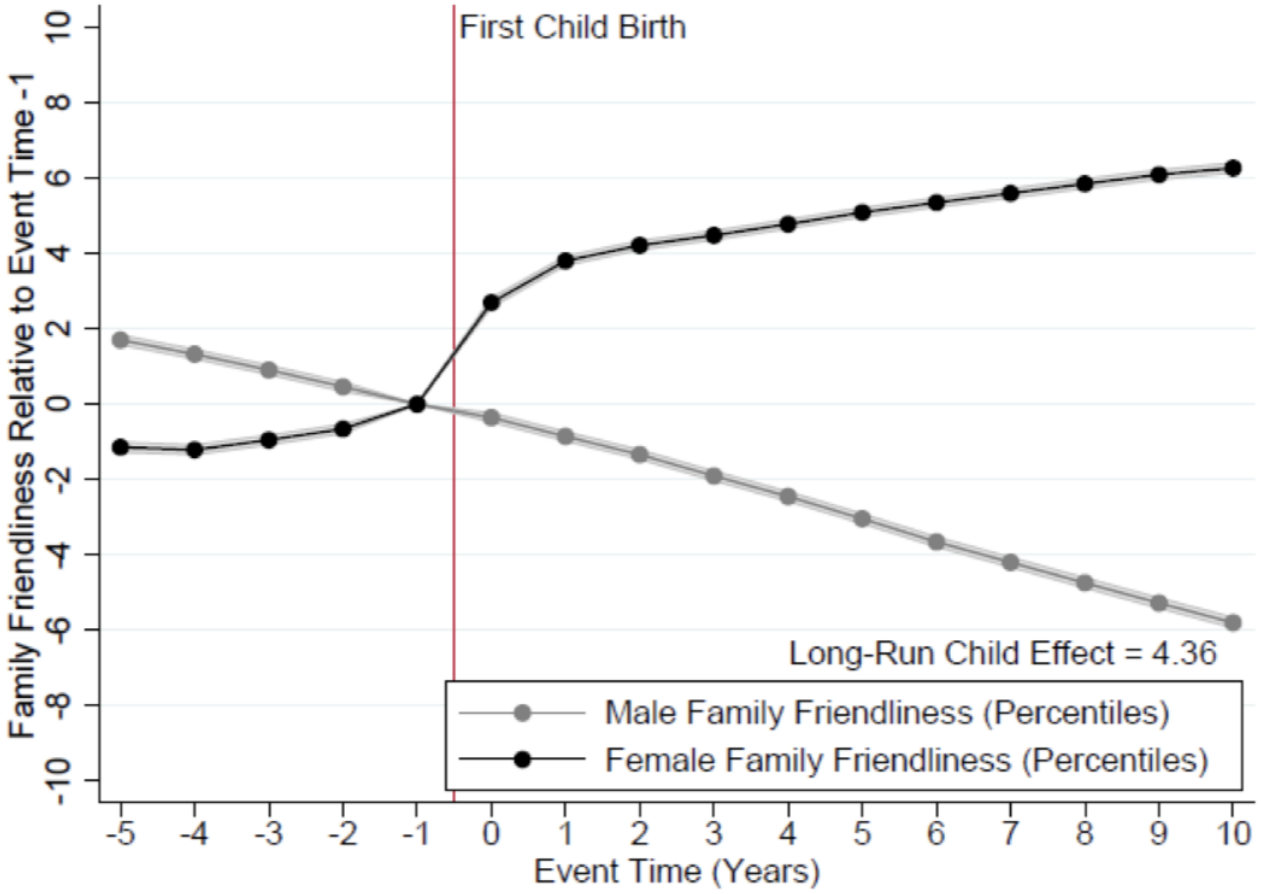
Anatomy of Child Impacts: Probability of Being a Manager



Anatomy of Child Impacts: Probability of Public Sector Job



Anatomy of Child Impacts: Family Friendliness of Firm



Impact of Children/Parenthood: Identification

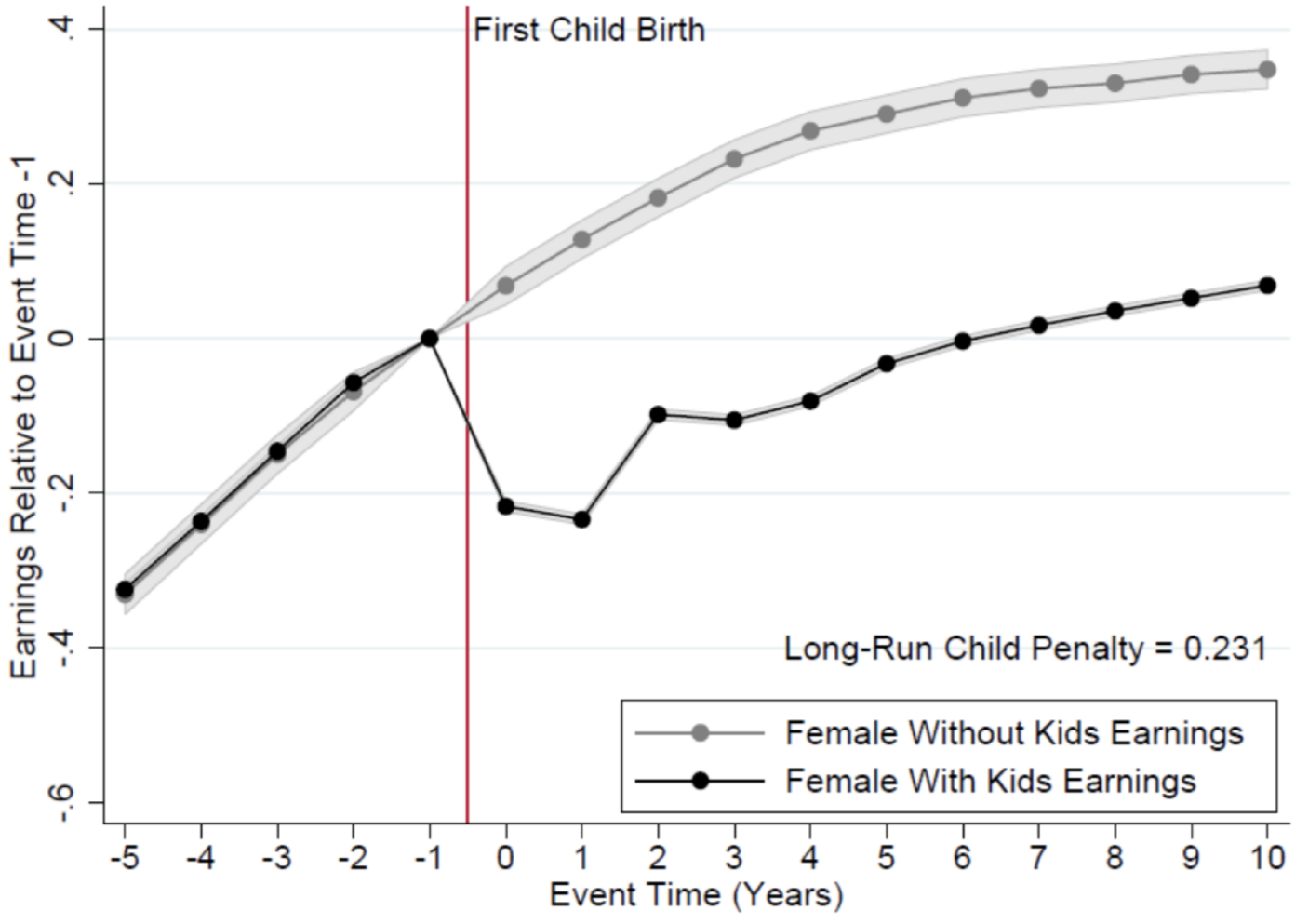
Kleven et al. (2016): Identification

- Child penalties capture the post - effect of children on the treated.
- Identification assumptions are different for short-run and long-run penalties:
- **Short-run** (effect of first child): smoothness of non-child earnings determinants around 0
- **Long-run** (effect of all children): parallel trends in non-child earnings determinants between men and women, conditional on age/year controls

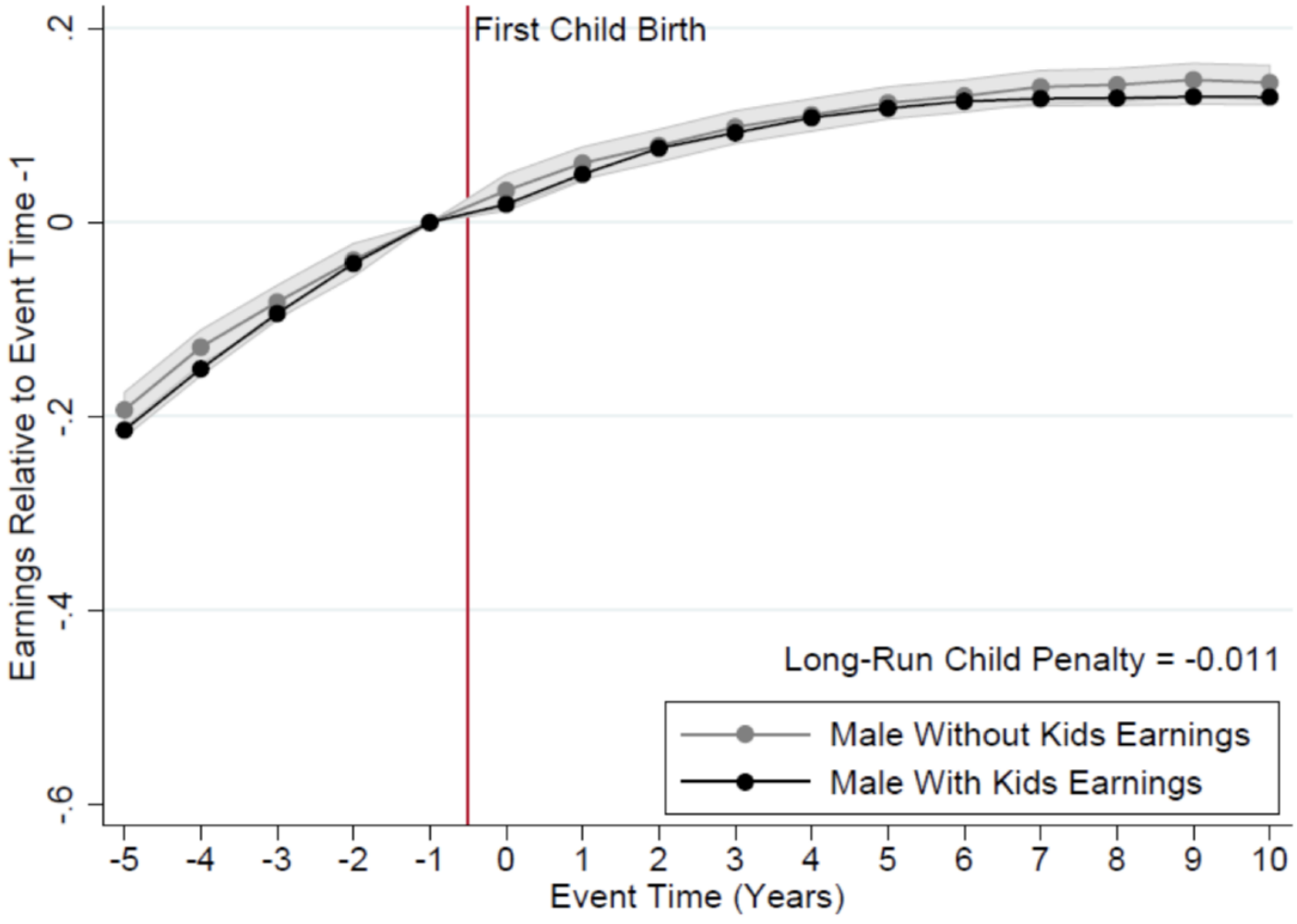
Kleven et al. (2016): Identification Checks for Long-Run Impacts

1. Use instrument for child birth
   - IV Event Study
   - Instruments: twin births and sibling sex mix (IV Estimates)
2. Use control group
   - DD Event Study
   - Use people who never have children as controls, assigning placebo births by drawing from the observed distribution of age at first child

Impacts of Children: DD Event Study for Women



Impacts of Children: DD Event Study for Men



Public Policies

Policies That Affect Gender Inequality

1. Anti-discrimination legislation
2. Tax and transfer policy
    1. Effects on gender inequality due to different labor supply elasticities for men and women
3. Parental leave policy
    1. Maternity leave
    2. Paternity leave
4. Childcare policy
    1. Public provision and/or subsidization of childcare
5. Elderly care policy

Public Policies: Parental Leave

Pros and Cons of Maternity Leave (Paid and Job-Protected)

Pros:

- Job-protected → promotes maternal employment → positive career effects
- Alleviate credit constraints
- Increases maternal time investment in children
- Encourages fertility

Cons:

- Paid → promotes maternal time-off → negative career effects
- Crowds out unpaid leave
- Costly for taxpayers
- Poorly targeted redistribution
- Encourages fertility

Pros and Cons of Parental and Paternity Leave

- Parental leave has similar pros and cons as maternity leave because, in practice, women tend to take it
- Paternity leave might improve gender equality, because men incur some of the career cost of work interruptions

Dahl et al. (2016): Paid Maternity Leave in Norway

- Evaluate paid maternity leave expansions in Norway, keeping job protection constant
- Six expansions from 18-35 weeks between 1987-92
- Each reform specified a birthdate cutoff for eligibility
  - Regression Discontinuity (RD)
  - Identification requires that parents cannot manipulate date of birth to become eligible
  - This is satisfied as each expansion was announced less than nine months in advance

Dahl et al. (2016): 1992 Reform

- Focus on the last of the expansions:
- Parents of children born after 1 April 1992 were eligible for 35 weeks of parental leave
- Parents of children born just before that were eligible for only 32 weeks
- Job protection is provided for a full year both before and after the reform

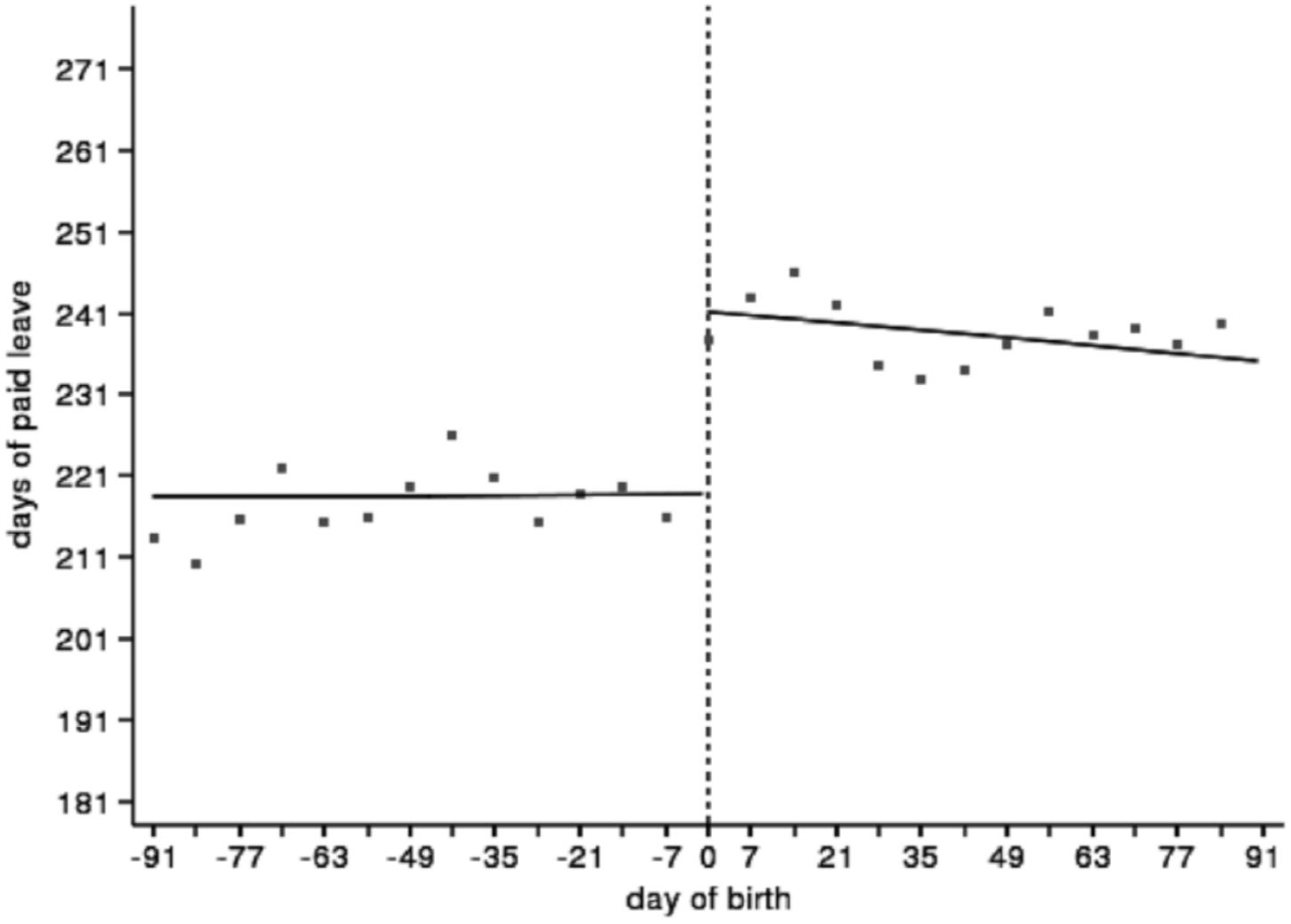
Dahl et al. (2016): Questions for Policy Evaluation

- Does paid leave simply crowd out unpaid leave?
- Does paid leave reduce gender inequality?
- Does it affect the children?
- How costly is it?
- Are there negative redistributional effects?

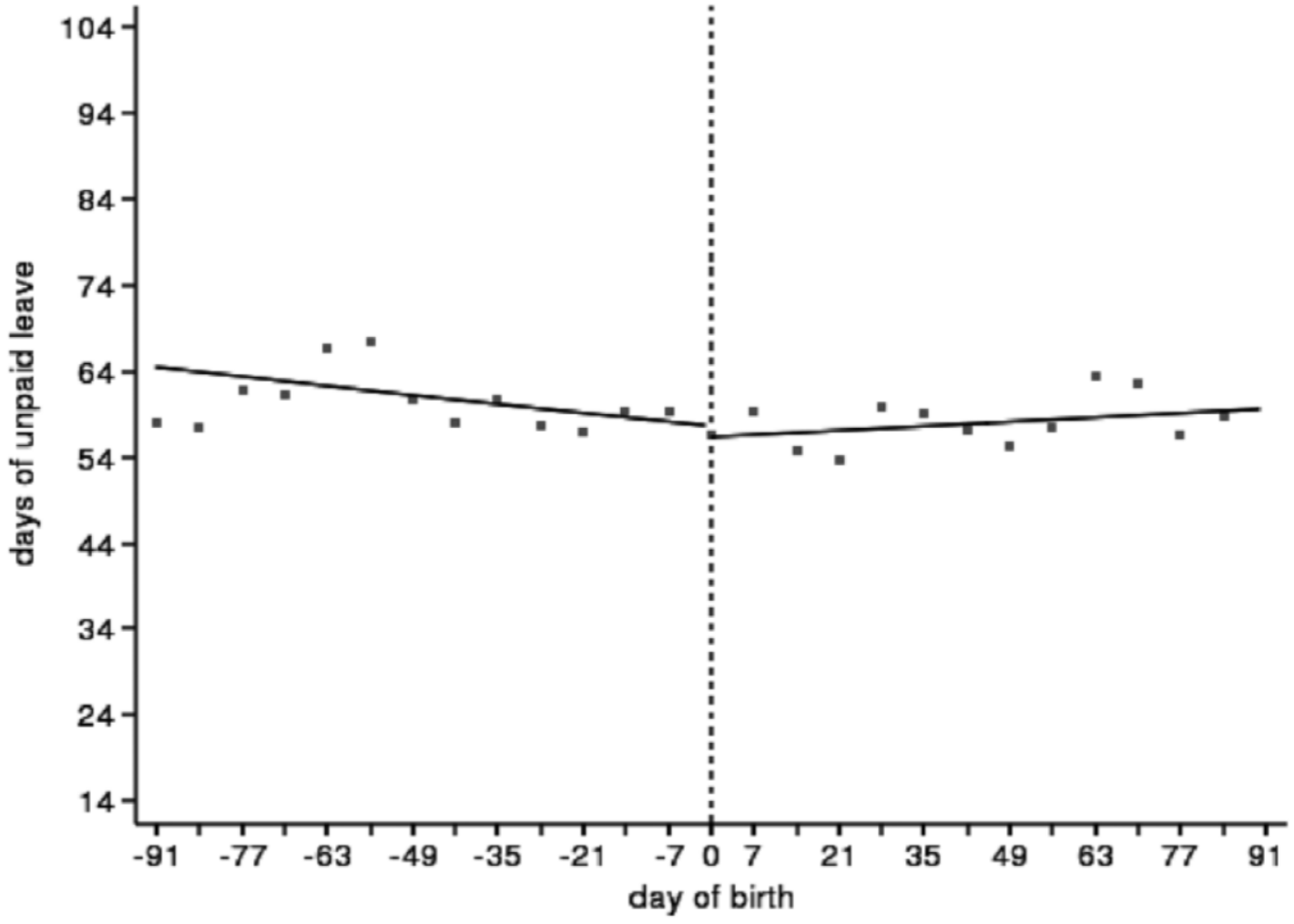
Dahl et al. (2016): Questions for Policy Evaluation

- **Does paid leave simply crowd out unpaid leave?**

Days of Paid Maternity Leave: 1992 Reform

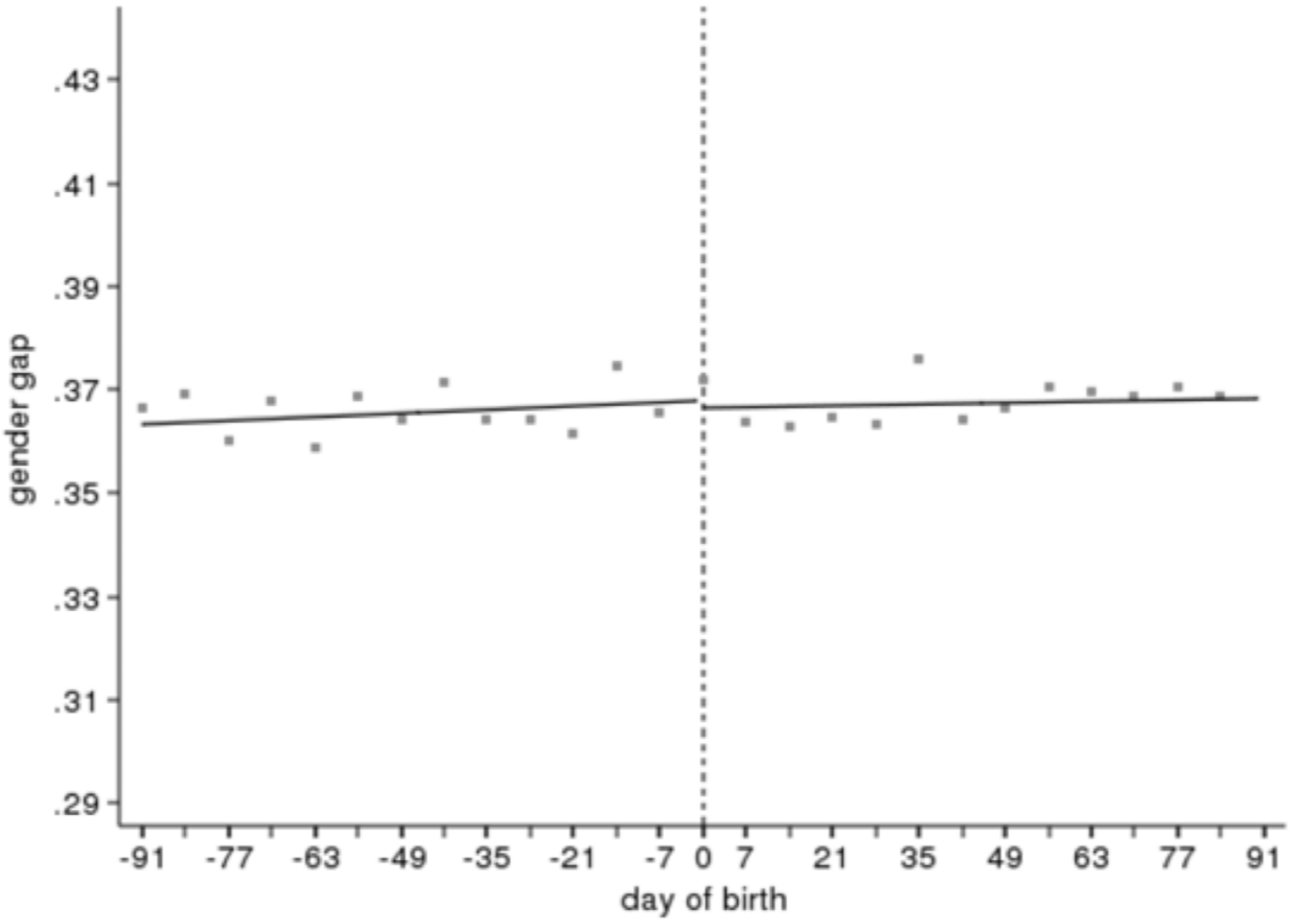


Days of Unpaid Maternity Leave: 1992 Reform

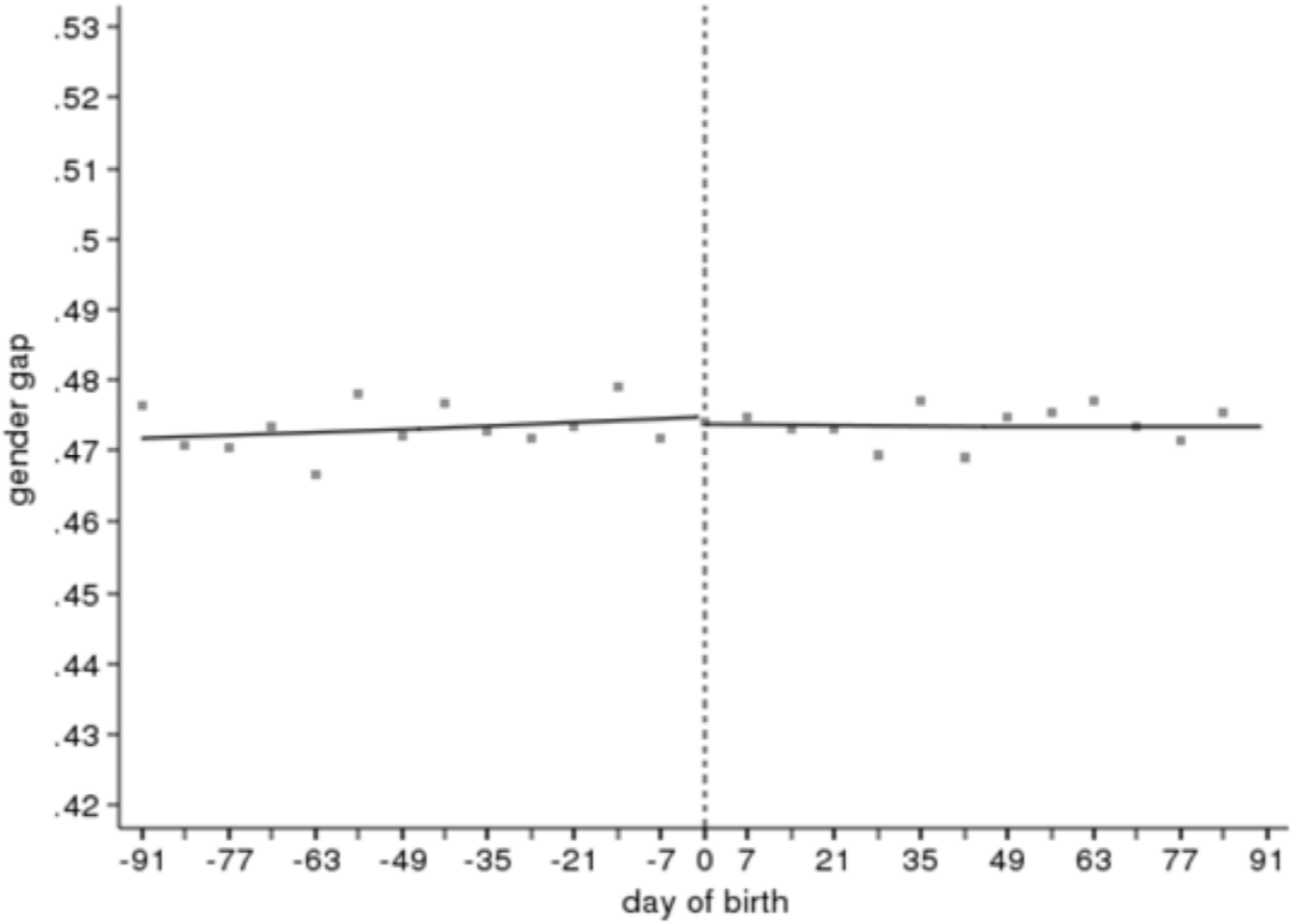


- **Does paid leave reduce gender inequality?**

Gender Gap in Annuity of Earnings: 1992 Reform

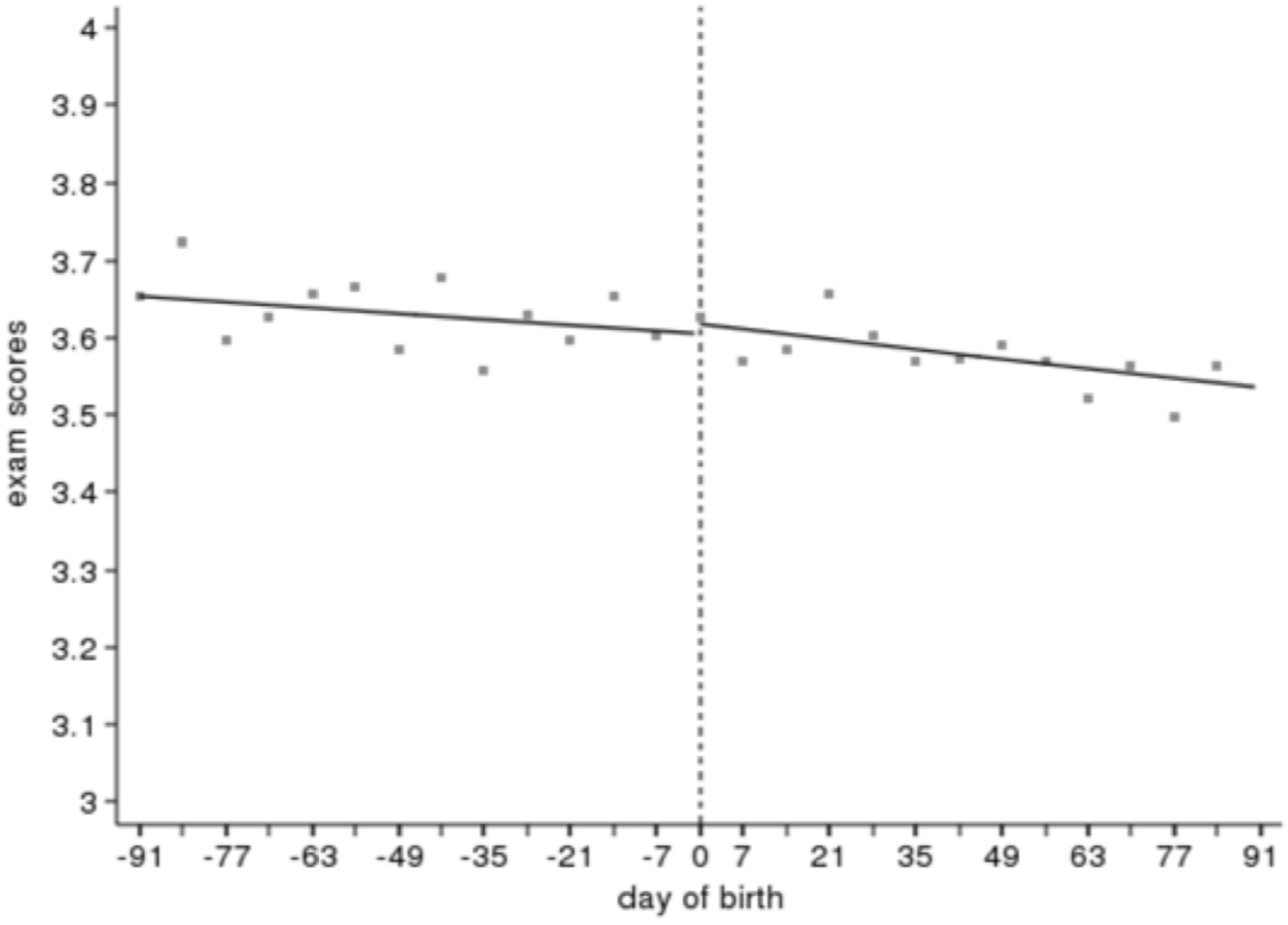


Gender Gap in Years Employed: 1992 Reform



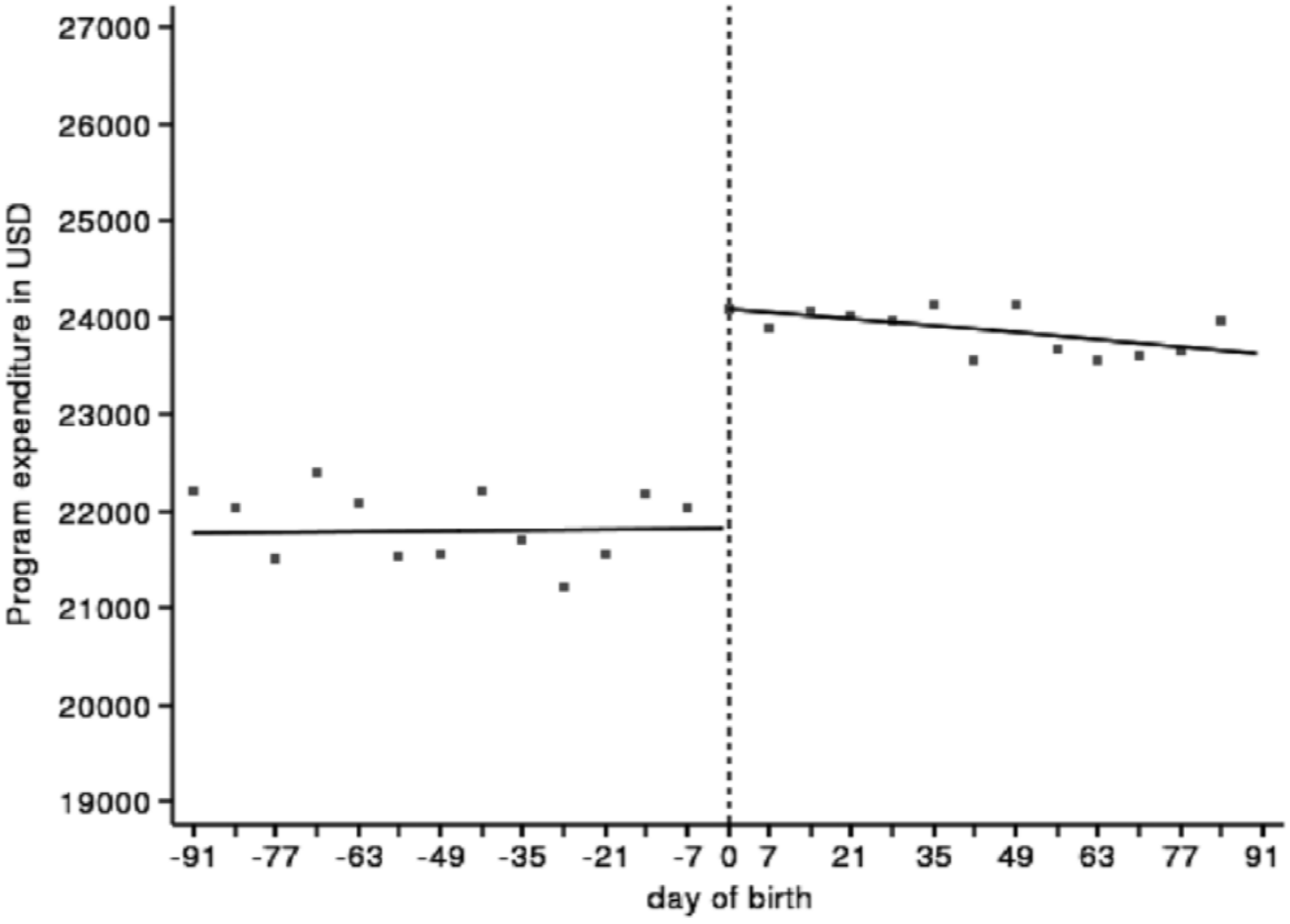
- **Does it affect the children?**

Child 9th Grade Exam Performance: 1992 Reform

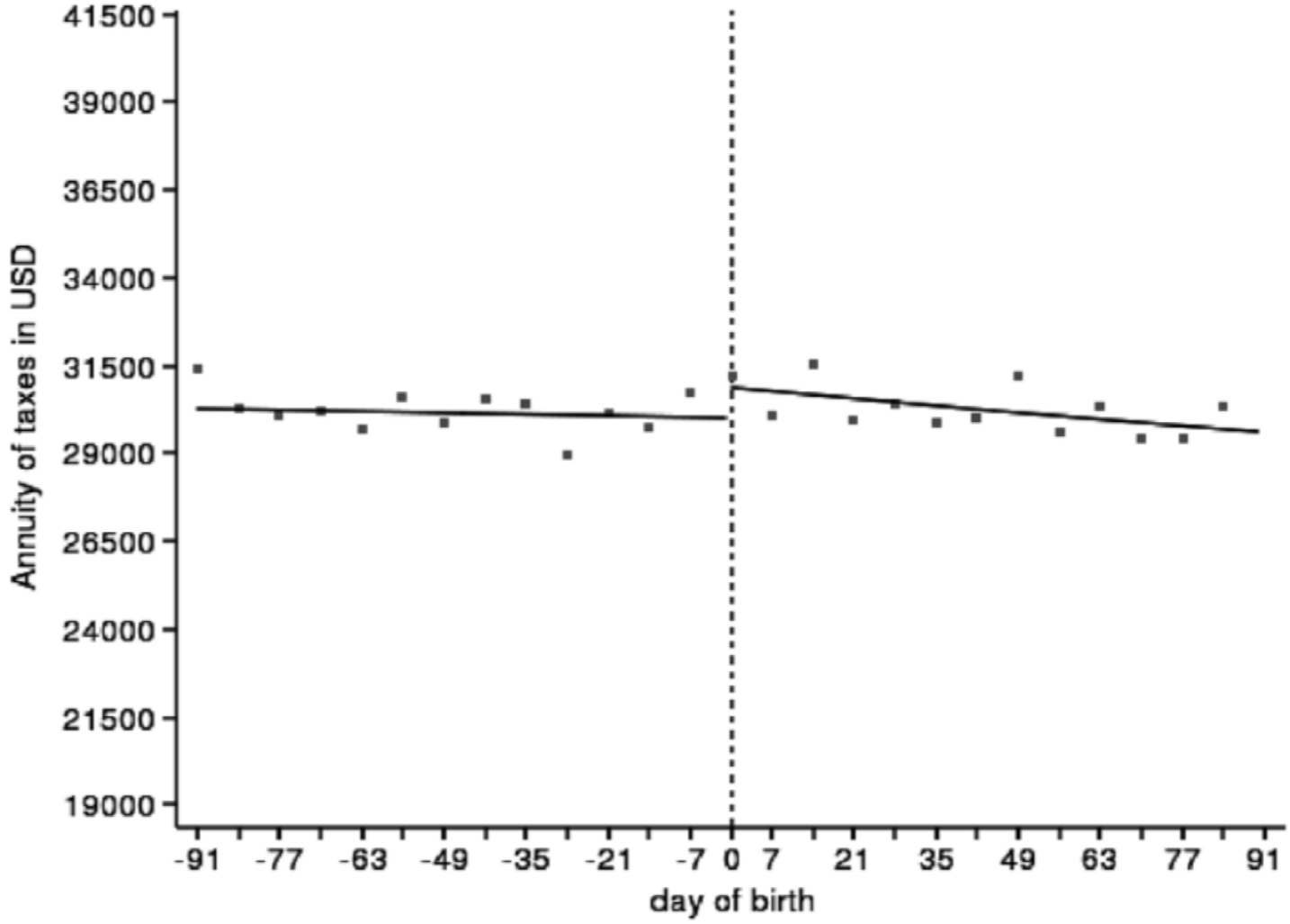


- **How costly is it?**

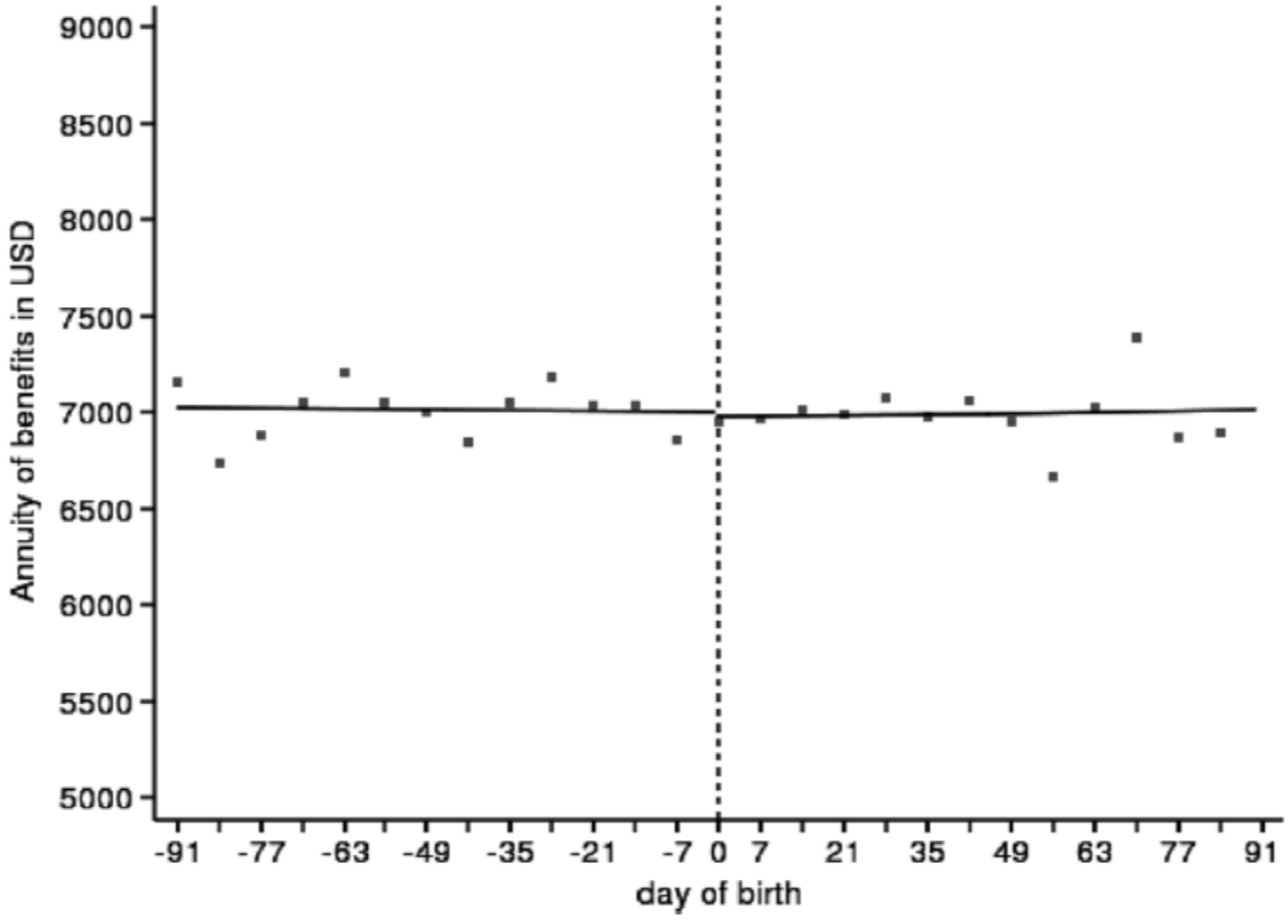
Program Expenditures for Paid Leave: 1992 Reform



Annuity of Taxes Paid: 1992 Reform

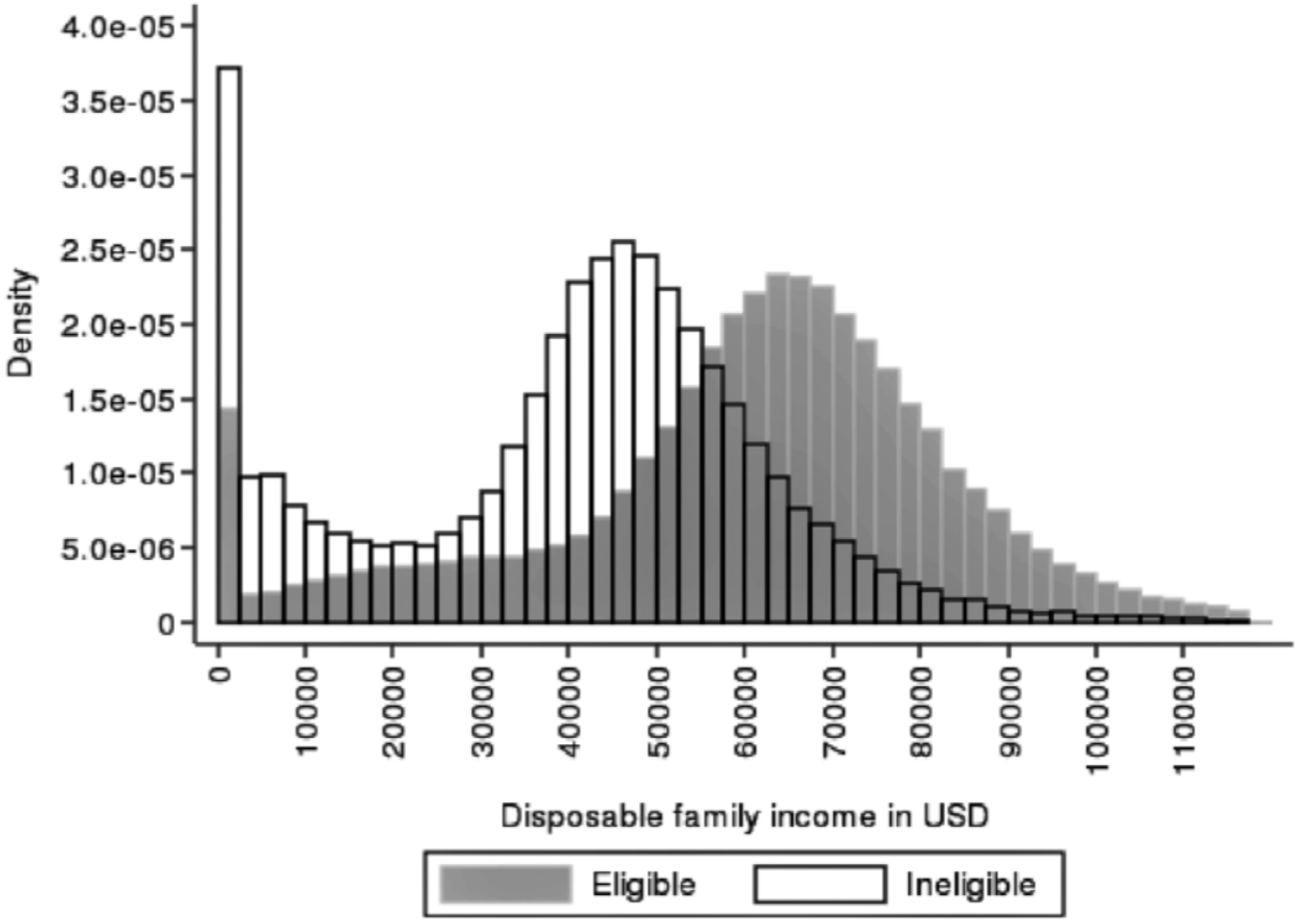


Annuity of Benefits Received: 1992 Reform

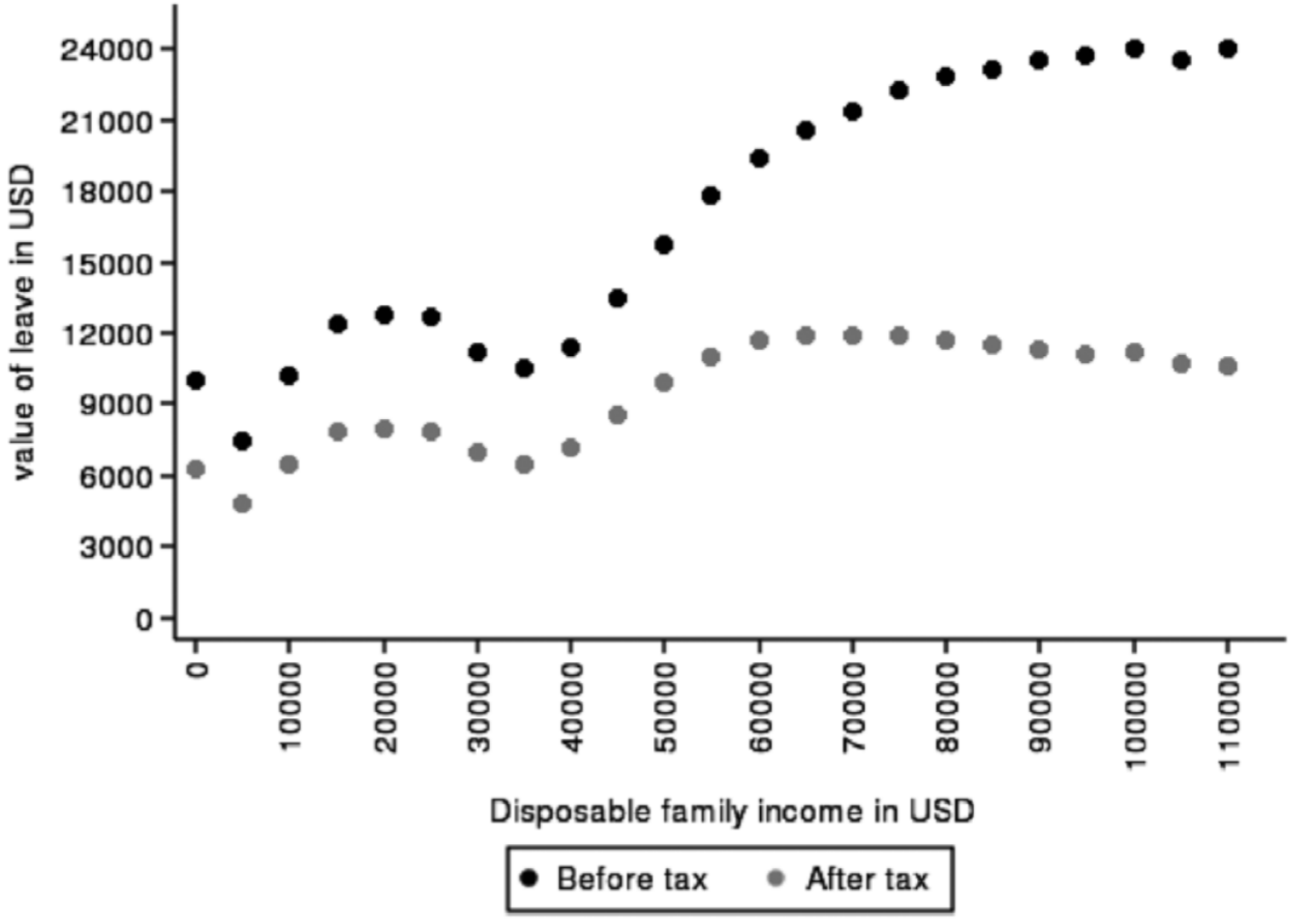


- **Are there negative redistributional effects?**

Distribution of Disposable Family Income the Year Prior to Birth



Average Value of Paid Leave Transfer by Disposable Family Income



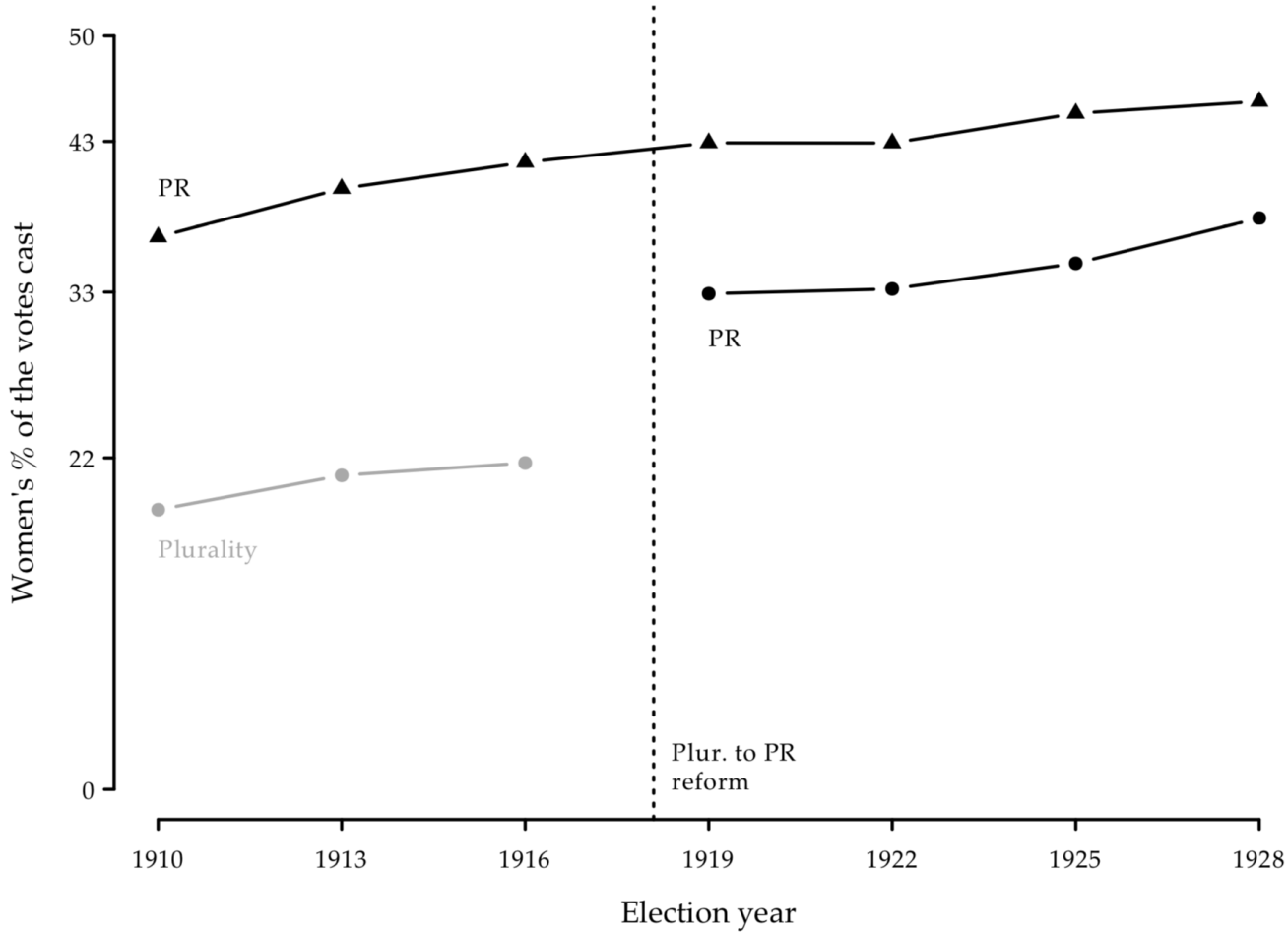
Dahl et al. (2016): Conclusions

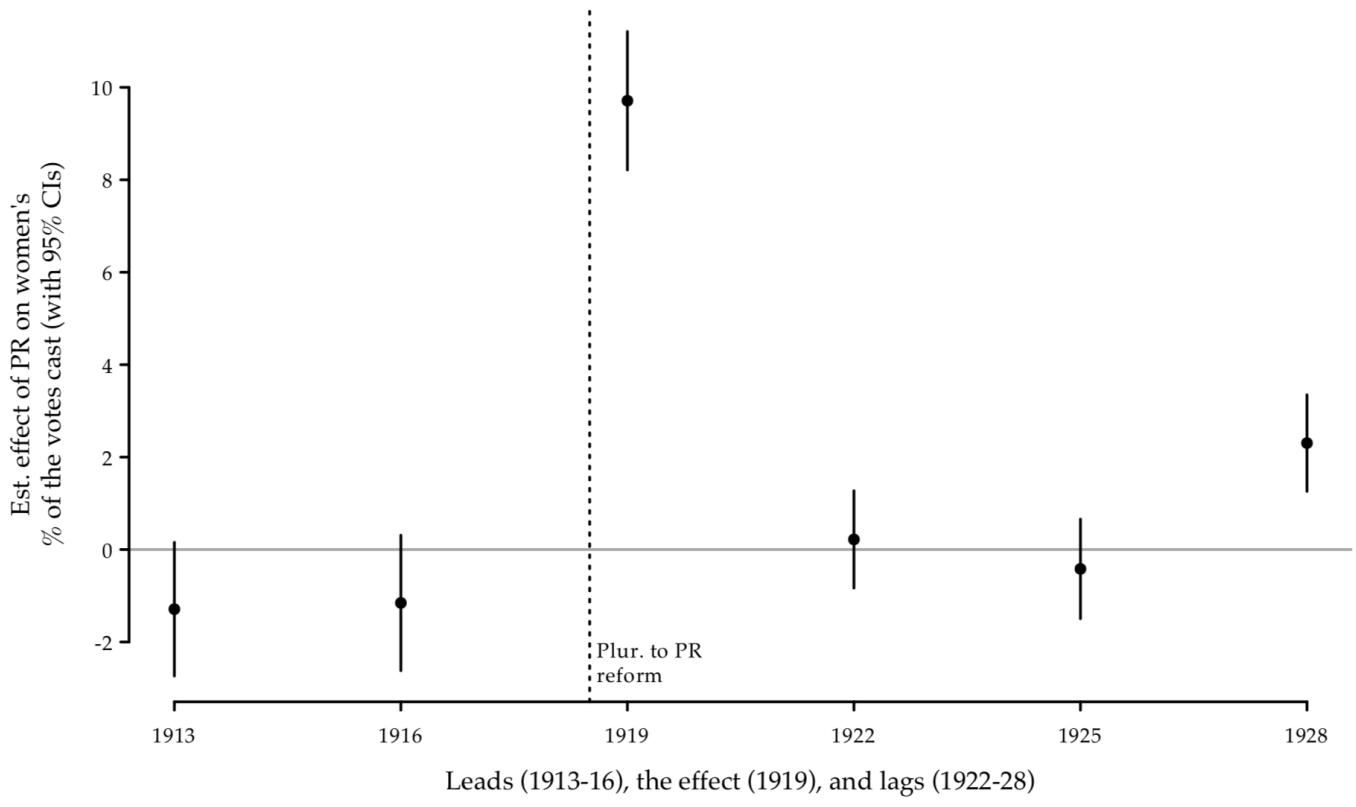
1. Paid leave does not crowd out unpaid leave
2. Paid leave does not reduce gender gaps
3. Paid leave does not benefit children
4. Paid leave is a costly program
5. And the program is regressive
6. **Paid leave expansions in Norway were inefficient**

- Next Thursday - Representation of Women in Politics

Electoral Institutions and Women's Political Participation (Skorge 2017)

- Do Electoral Rule affect the representation of women in parlament?
- Context is Norway
- Reform 1919


50
43
33
22
0
Women's % of the votes cast
PR
PR
Plurality
Plur. to PR
reform
1910
1913
1916
1919
1922
1925
1928
Election year


Est. effect of PR on women's
% of the votes cast (with 95% CIs)
10
8
6
4
2
0
-2
Plur. to PR
reform
1913
1916
1919
1922
1925
1928
Leads (1913-16), the effect (1919), and lags (1922-28)

The effects of female leadership on women's voice in political debate Blumenau (2019)

- Do female leaders amplify the voices of other women in politics?
- When women are promoted to high office, do they serve as role models to other women in politics?

Many years ago I worked in the House of Commons for a woman that I admired very much called Barbara Castle. She was my role model because I felt, well, if Barbara can do it then I can do it. (Boothroyd, 2013) Baroness Boothroyd, Former Speaker of the House of Commons.

Female leadership and voice in parliamentary debate

Why might the appointment of women to positions of high office affect the participation and influence of other women in political debate?

- Role Models mechanism. Role models in politics can have inspirational effects.
- Above role model effects, female leaders may also simply behave differently from their male counterparts, and do so in ways that is conducive to the participation and influence of other women.

Female leadership and voice in parliamentary debate

Why might the appointment of women to positions of high office affect the participation and influence of other women in political debate?

- Role Models mechanism. Role models in politics can have inspirational effects.
- Above role model effects, female leaders may also simply behave differently from their male counterparts, and do so in ways that is conducive to the participation and influence of other women.

The effects of female leadership on women's voice in political debate Blumenau (2019)

- Causal identification of role-model effects, however, presents an empirical challenge. Ministries to which women are appointed differ in several ways from ministries presided over by men.
    - In particular, the factors that drive the appointment of female ministers to certain ministries are correlated with the probability that women participate in policy debates pertaining to those ministries.
- Because of this, simple estimates of the relationship between cabinet minister gender and female debate participation will be upwardly biased.

The effects of female leadership on women's voice in political debate Blumenau (2019)

- Dfference-in-differences design which exploits over-time variation in the gender of cabinet ministers
- The strategy here exploits within-ministry variation in the gender of the cabinet minister over time. By assigning each debate to a specific ministry, it compares the level of female debate participation in a ministry before and after a switch in the gender of the minister, and compare this difference to changes in female participation in other ministries where the gender of the minister remains constant. DiD in multiple periods.

Data

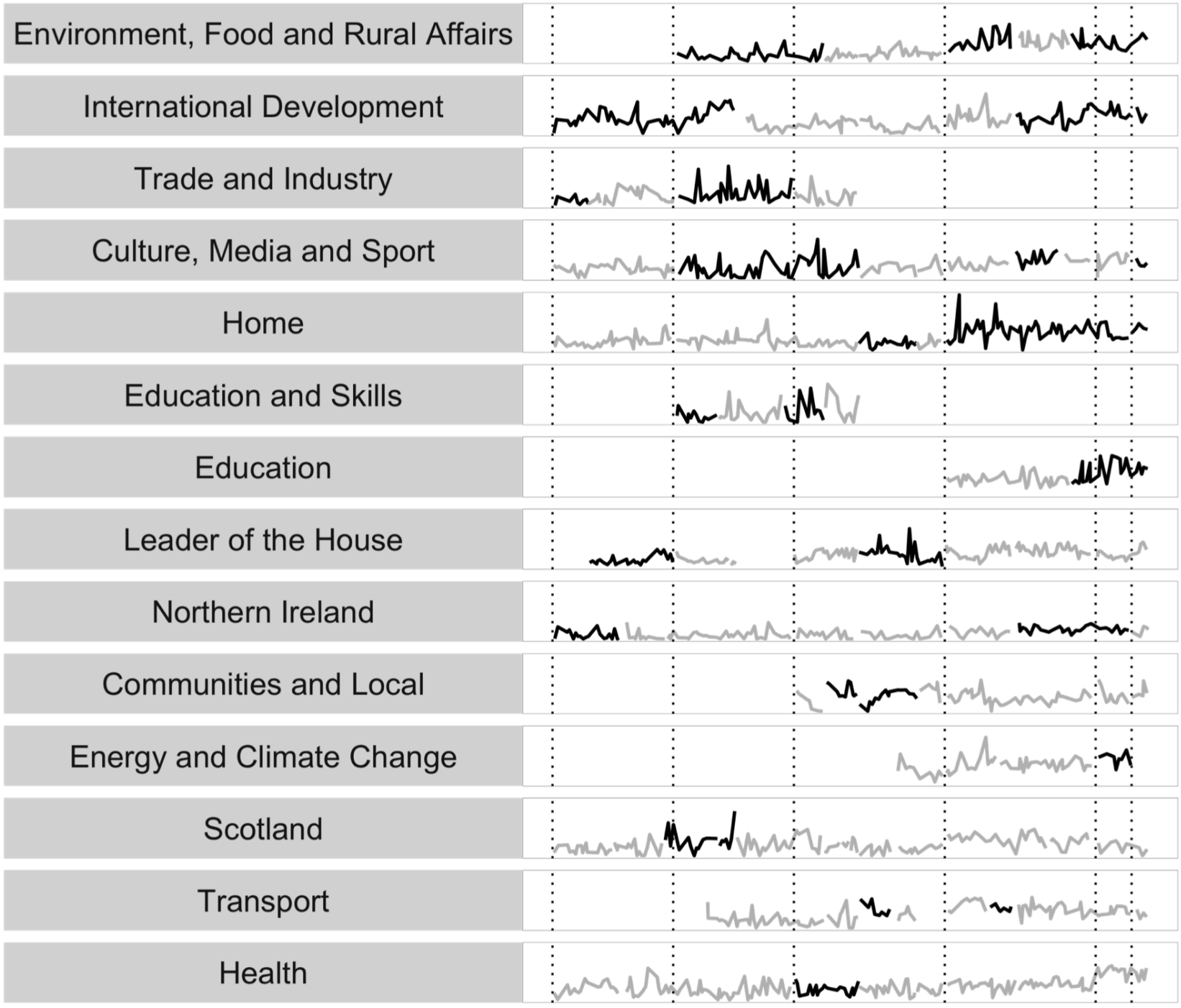
All House of Commons floor debates between May 1997 and February 2017. The full sample contains 53,397 debates, comprising over a million individual speeches.

$$PropWordsWomen_{d(mt)} = \beta_1 * FemaleMinister_{mt} + \lambda_m + \delta_t + \varepsilon_{d(mt)}$$

$$PropWordsWomen_{d(mt)} = \frac{womenwords_{d(mt)}}{wordsmenANDwomen_{d(mt)}}$$

Methodology

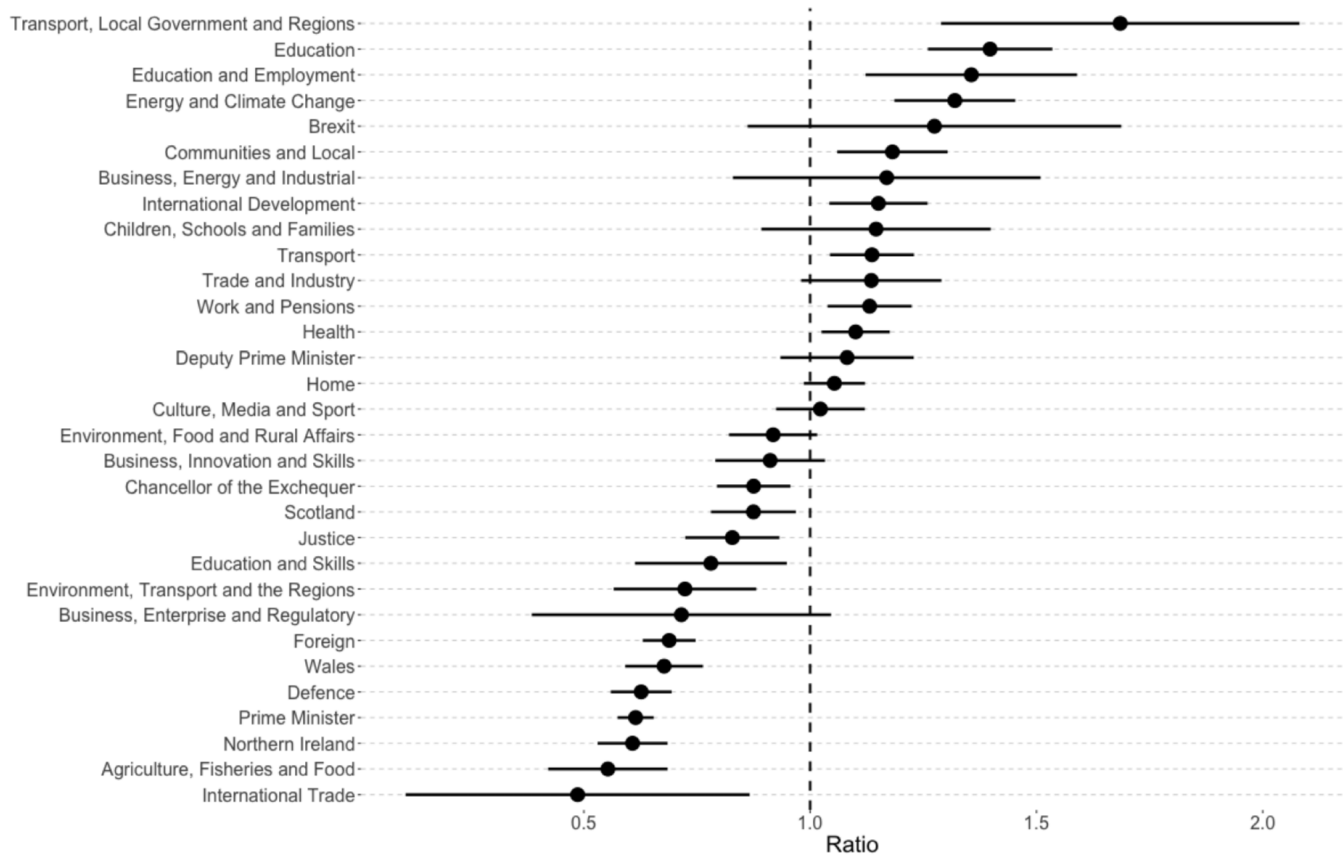
All House of Commons floor debates between May 1997 and February 2017. The full sample contains 53,397 debates, comprising over a million individual speeches.


Environment, Food and Rural Affairs
International Development
Trade and Industry
Culture, Media and Sport
Home
Education and Skills
Education
Leader of the House
Northern Ireland
Communities and Local
Energy and Climate Change
Scotland
Transport
Health

S1. Appendix

A. Female speech ratio

Figure S1: Female speech ratio, by ministry



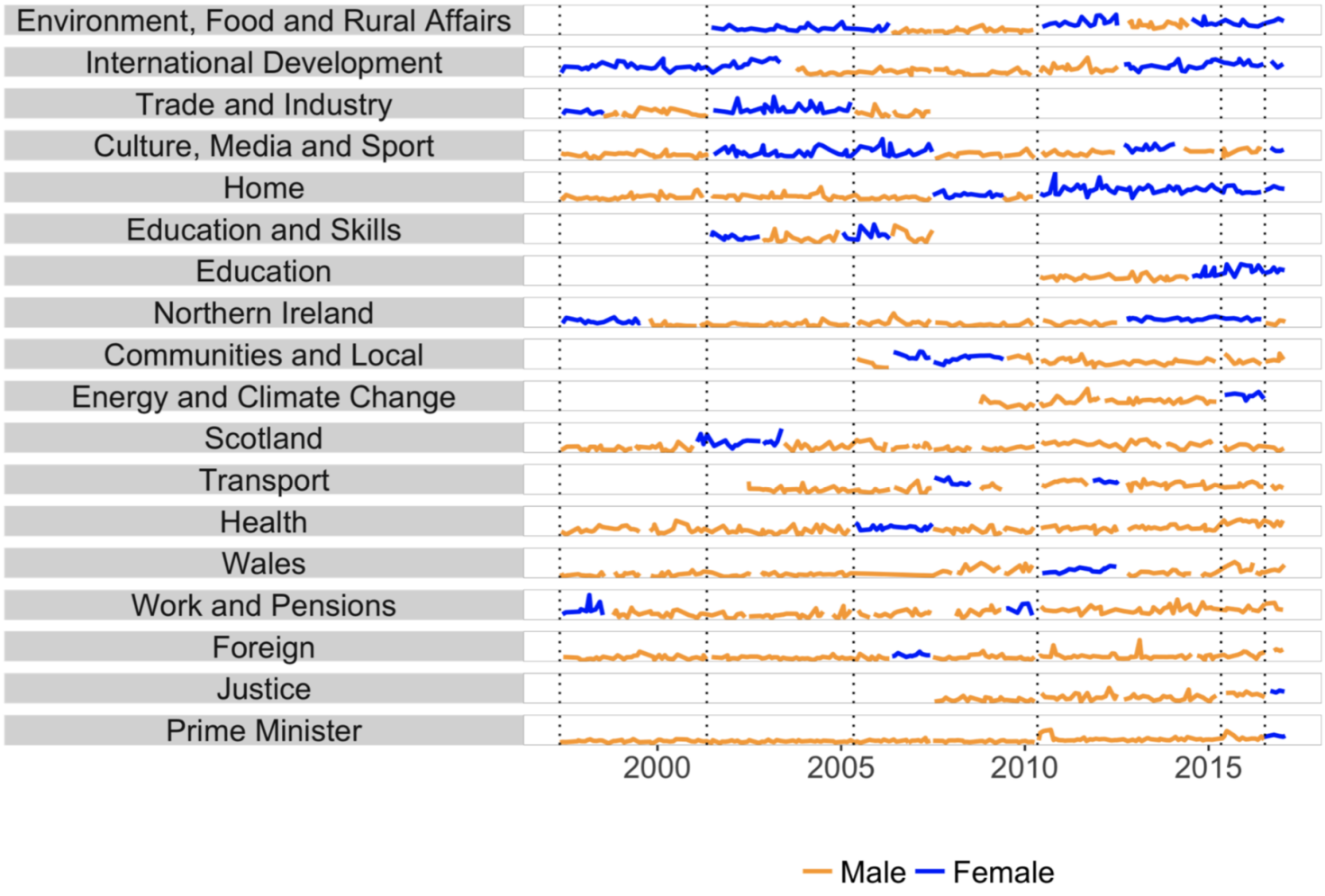
Note: The figure shows the average female speech ratio as defined in equation S1 for each ministry, pooled across all debates in the data. It is clear from the figure that some ministries are subject to greater levels of female participation than others.

B. Independent variable

Figure S2: Gender of ministers over time

Note: The figure shows the distribution of the independent variable over time. While some ministries are never held by a woman (those all in orange), the gender of the minister in several ministries varies over time.

Evolution of the dependent variable over time



NOTE: The plot shows the proportion of words spoken by women in each calendar month, in each ministry that experienced a change in the gender of the presiding minister.

Results

	Prop Words Women						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Female minister	0.073***	0.059***	0.064***	0.044***	0.036***	0.041***	0.042***
	(0.019)	(0.015)	(0.019)	(0.013)	(0.012)	(0.010)	(0.008)
Constant	0.173***	0.093*	0.101	0.035	0.044	0.191	0.087
	(0.011)	(0.048)	(0.087)	(0.054)	(2.765)	(167.177)	(0.196)
Month FEs	×	✓	×	✓	✓	✓	✓
Ministry FEs	×	×	✓	✓	✓	✓	✓
Linear time trends	×	×	×	×	✓	✓	×
Quadratic time trends	×	×	×	×	×	✓	×
Flexible time trends	×	×	×	×	×	×	✓
Effect Size %	42	34	37	26	20	24	24
95% CI	[21,63]	[17,51]	[16,58]	[11,40]	[6,35]	[12,35]	[15,33]
Observations	13,246	13,246	13,246	13,246	13,246	13,246	13,246
R^2	0.016	0.078	0.058	0.109	0.116	0.125	
Adjusted R^2	0.016	0.063	0.056	0.093	0.098	0.105	0.114

NOTE: Models 1-6 represent OLS fixed-effect regressions for the period 1997-2017. Regression coefficients are shown with bootstrapped cluster-robust standard errors (clustered by ministry) shown in parentheses. The "Effect Size" row indicates the percentage increase in female participation relative to the average female participation rate under male ministers. *p<0.1; **p<0.05; ***p<0.01

Just Participation or also Influence?

$$
\begin{aligned}
influence_{id(mt)} = \; & \beta_1 * FemaleMP_i + \beta_2 * FemaleMinister_{mt} + \\
& \beta_3 * (FemaleMP_i * FemaleMinister_{mt}) + \\
& \sum_{p=1}^{P} \beta_{\text{party}_p} * Party_i + \lambda_{m0} + \lambda_{m1} t + \lambda_{m2} t^2 + \delta_t + \epsilon_{id(mt)}
\end{aligned}
$$

- β_1 captures the average difference in influ- ence between male and female MPs when the minister is male
- β_2 represents the marginal effect of a female minister on the influence of male MPs
- The interaction term is the effect for female MP - coeff of interest

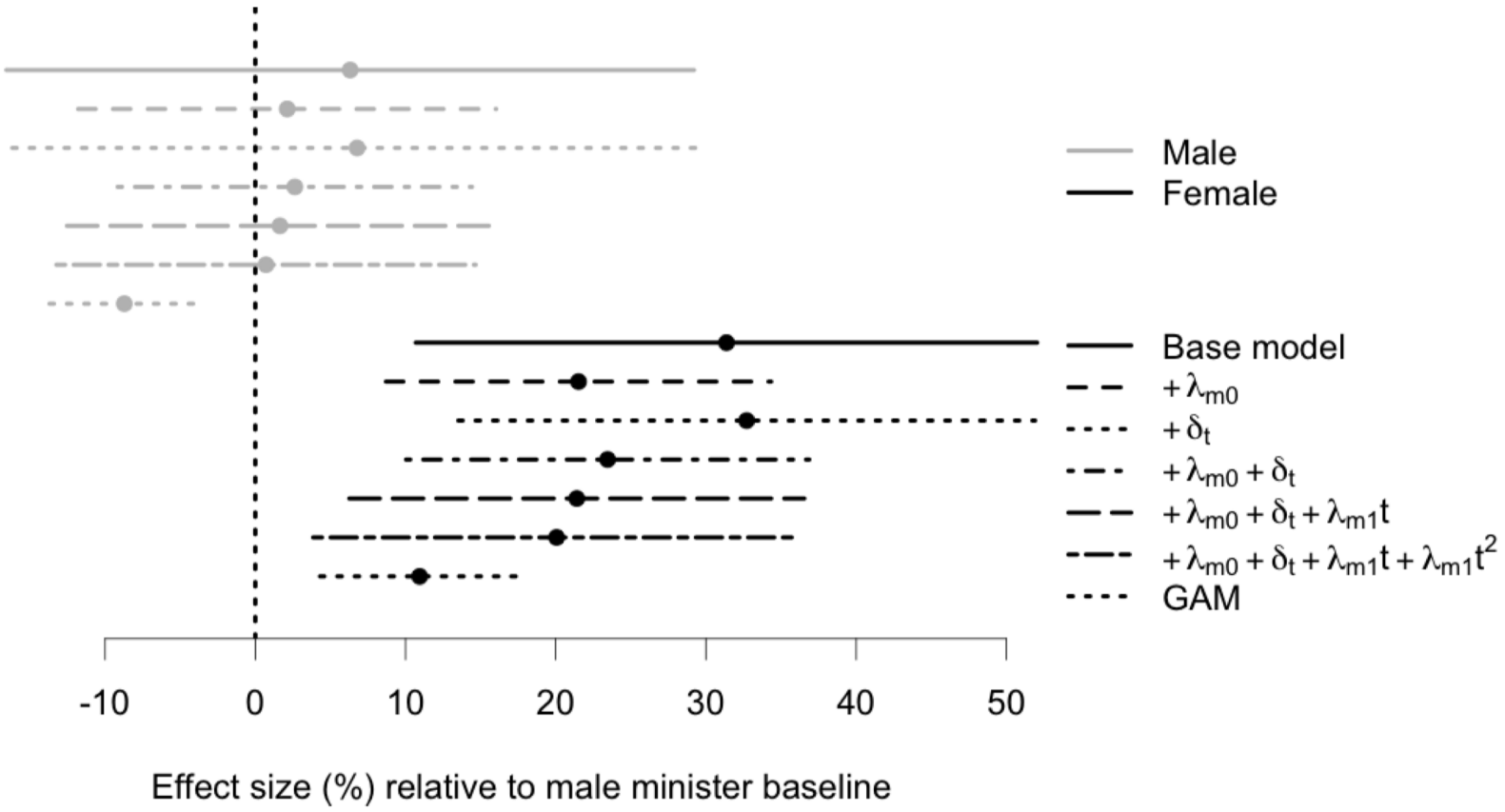
Just Participation or also Influence?

	Influence						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Constant	0.038***	0.033***	0.048***	0.022	0.041***	−0.855***	35.991
	(0.006)	(0.002)	(0.014)	(0.018)	(0.014)	(0.296)	(164.948)
Female minister	0.003	0.001	0.003	0.001	0.001	0.001	−0.004***
	(0.005)	(0.003)	(0.005)	(0.003)	(0.003)	(0.003)	(0.001)
Female MP	−0.001	−0.0001	0.001	0.001	0.001	0.002	0.001
	(0.002)	(0.002)	(0.001)	(0.002)	(0.002)	(0.002)	(0.001)
Interaction	0.011***	0.008***	0.011***	0.009***	0.009***	0.008***	0.009***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.001)
Party FEs	✓	✓	✓	✓	✓	✓	✓
Ministry FEs	×	✓	×	✓	✓	✓	✓
Month FEs	×	×	✓	✓	✓	✓	✓
Linear time trends	×	×	×	×	✓	✓	×
Quadratic time trends	×	×	×	×	×	✓	×
Flexible time trends	×	×	×	×	×	×	✓
Observations	174,419	174,419	174,419	174,419	174,419	174,419	174,419
R^2	0.002	0.044	0.016	0.055	0.062	0.065	
Adjusted R^2	0.002	0.044	0.014	0.054	0.060	0.063	0.075

NOTE: Models 1-6 present OLS fixed-effect regressions for the period 1997-2017, model 7 presents results from the GAM. Regression coefficients are shown with robust standard errors (clustered by ministry) shown in parentheses. *p<0.1; **p<0.05; ***p<0.01

	Influence (female MPs)						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Female minister	0.014***	0.008***	0.016***	0.010***	0.008*	0.007**	0.005**
	(0.005)	(0.003)	(0.005)	(0.003)	(0.004)	(0.004)	(0.002)
Party FEs	✓	✓	✓	✓	✓	✓	✓
Ministry FEs	×	✓	×	✓	✓	✓	✓
Month FEs	×	×	✓	✓	✓	✓	✓
Linear time trends	×	×	×	×	✓	✓	×
Quadratic time trends	×	×	×	×	×	✓	×
Flexible time trends	×	×	×	×	×	×	✓
Observations	32,905	32,905	32,905	32,905	32,905	32,905	32,905
R^2	0.006	0.053	0.025	0.067	0.075	0.079	
Adjusted R^2	0.006	0.052	0.018	0.060	0.067	0.070	0.085

Just Participation or also Influence?



DiD Due Diligence

D. Dynamic panel model estimates

Figure S3: Dynamic panel model estimates