

Pay Transparency and Gender Equality

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UCL workshop

The views expressed do not reflect those of the Bank of England.

Motivation

- ▶ Most OECD countries have introduced pay transparency policies recently
- ▶ **Pay transparency**: requirement to disclose information on employees' pay
- ▶ Rationale: **gender inequality** persists in part because it is **hidden** (Baker et al. 2022, Cullen and Perez-Truglia 2023)
- ▶ **Theoretically**: Information shock that alters bargaining power vis-à-vis the firm in opposite ways across genders:
 - ▶ Push lower-paid individuals to demand higher pay from their employer
 - ▶ Allow employers to push back requests for pay increases by high-paid employees (Cullen and Pakzad-Hurson 2021)
- ▶ (+/-) effect on productivity and retention (Card et al. 2012, Breza et al. 2018)
- ▶ Magnitude may depend on shock salience:
 - ▶ Wider availability of information could magnify the disciplinary effects of these policies (Dranove and Jin 2010, Perez-Truglia and Troiano 2015)

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 - ▶ Imposed on all firms with 250+ employees
 - ▶ Public reporting on government website of:
 - ▶ Raw % gender gaps in mean/median pay/bonus gaps
 - ▶ Female share in quartiles of wage distribution
- ▶ Studies impact of publicly disclosing gender equality indicators on:
 1. Gender gaps in pay and career outcomes
 - ▶ Using the Annual Survey of Hours and Earnings from 2013 to 2021
 - ▶ Comparing outcomes in firms around 250-employee cutoff before/after mandate
 2. Mechanisms:
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Contribution to the literature

▶ **Studies on pay transparency policies and gender equality**

(Bennedsen et al. 2022, Baker et al. 2022, Brütt and Yuan 2022, Gulyas et al. 2022, Obloj and Zenger 2022)

- ▶ Unique setting: **public disclosure of GPG** (vs. private info on levels by gender)
 1. Comparison with own gender shut down;
 2. Performance comparison + Public scrutiny
- ▶ Rich information on employees' pay: contractual pay, bonuses, hours
 1. Unpack the impact of the policy on different pay components;
 2. Shed light on how firms restructure rewarding schemes to tackle the gender pay gap

Institutional setting: UK 2017 GPG reporting

1. **Targeted** at firms with 250+ employees in April Headcount Why 250/ other policies
2. **Timing:** Firms' report due by the end of next financial year (April) Timeline
3. **Info disclosed:** % GPG, % women by wage quartile Summary stats
4. **Compliance**
 - ▶ Almost 100% compliance according to the Equality and Human Rights Commission
 - ▶ Potential sanctions on non-compliers (but not on bad performance)
 - ▶ Only 3% below 250
5. **Information shock**
 - ▶ Only 1/3 firms used to keep track of pay by gender before this mandate
 - ▶ Only 3% made these figures publicly available (Government Equalities Office 2015)
6. **Saliience**
 - ▶ Indicators published on a dedicated government website
 - ▶ Large media attention at deadline (*FT* 2018-2024, *Guardian* 2018-2024)
 - ▶ Spike of Google searches for "gender pay gap" at deadline Google Trends

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Identification strategy

- ▶ Triple-differences strategy exploiting variation in the mandate across firm size, time, and gender, aimed at capturing the relative impact of the policy across genders:

- ▶ $TreatedFirm_j = \mathbf{1}[\mathbf{Firm\ size} \geq \mathbf{250\ employees\ in\ 2015}]$

Firm size density

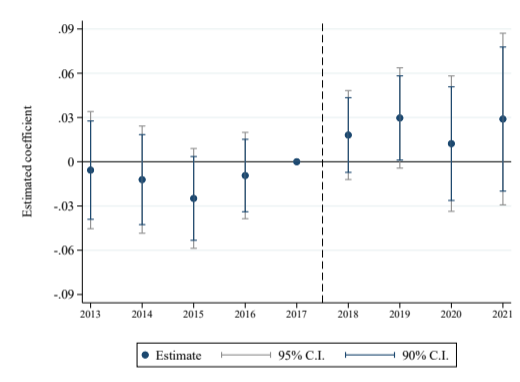
- ▶ Focus on firms with +/- 50 employees from the 250 cutoff

- ▶ $Post_t = \mathbf{1}[\mathbf{Year} \geq \mathbf{2018}]$

$$Y_{ijt} = \beta (TreatedFirm_j * Post_t) + \gamma (TreatedFirm_j * Post_t * Fem_i) + \alpha_{ij} + \theta_{rt}^M + \theta_{rt}^F + u_{ijt}, \quad (1)$$

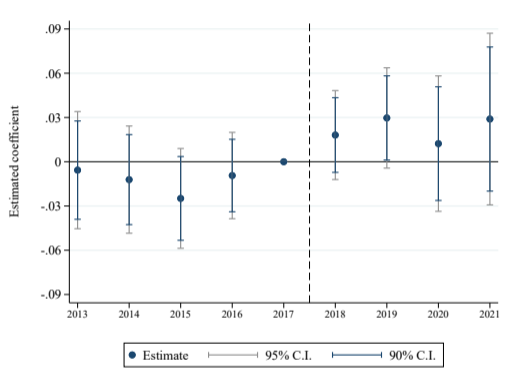
- ▶ i = employee; j = firm with 200-300 employees; t = year between 2013 to 2021
- ▶ Y_{ijt} = real pay, bonus share, promotion
- ▶ α_{ij} = Firm*Individual fixed effects, θ_t^g = gender-region specific time shocks
- ▶ Heteroskedasticity-robust SE clustered at the firm level

Impact on gender gap in hourly pay



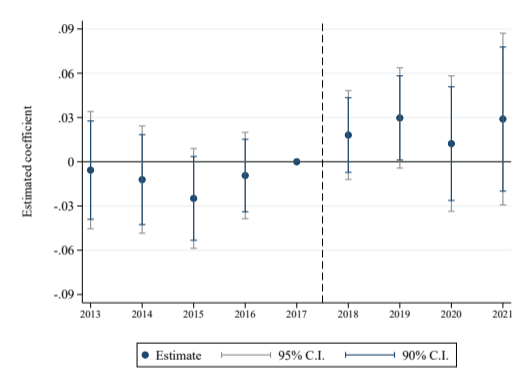
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- ▶ On average, the policy leads to a 19% reduction in the gender pay gap relative to pre-policy mean

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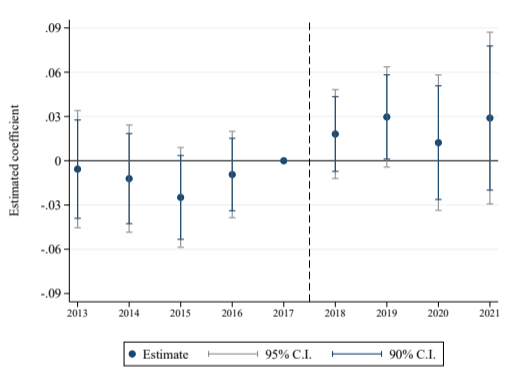
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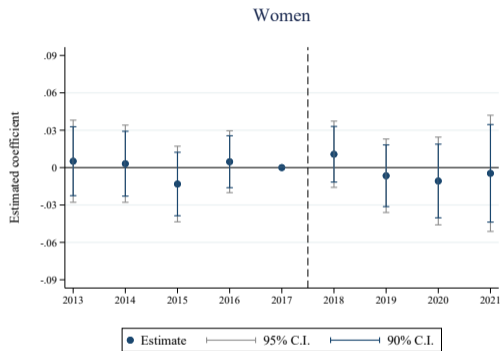
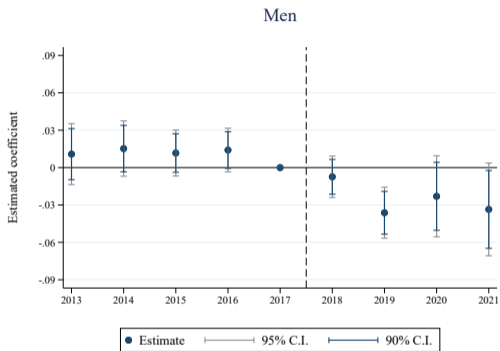
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Impact on hourly pay by gender



- ▶ The reduction in the gender pay gap is driven by a slowdown in men's pay growth

Average effects

Impact on promotions

Robustness checks

Composition effects

Mechanisms

- ▶ Innovative feature of UK transparency policy: firms must disclose their equality indicators publicly.
- ▶ The public availability of this information has the potential to magnify the disciplinary effects of transparency policies by:
 1. Enabling comparisons across firms (Allcott and Kessler 2019, Johnson 2020);
 2. Enhancing public scrutiny (Dranove and Jin 2010, Luca 2018, Perez-Truglia and Troiano 2015)
- ▶ Mixed results in context where information is only available internally (Bennedsen et al. 2022, Gulyas et al. 2022)
- ▶ In contrast, pay transparency enhances gender equality in contexts where this information is publicly available (Baker et al. 2022, Obloj and Zenger 2022)

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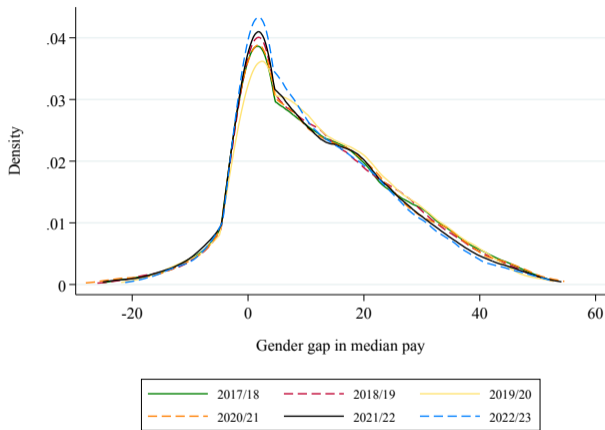
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Mechanisms

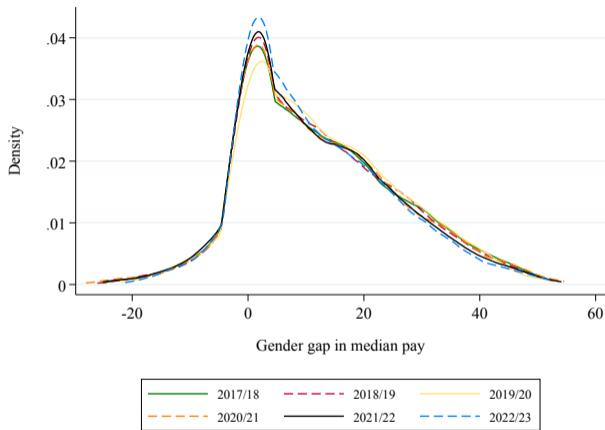
- ▶ Innovative feature of UK transparency policy: firms must disclose their equality indicators publicly.
- ▶ The public availability of this information has the potential to magnify the disciplinary effects of transparency policies by:
 1. Enabling comparisons across firms (Allcott and Kessler 2019, Johnson 2020);
 2. Enhancing public scrutiny (Dranove and Jin 2010, Luca 2018, Perez-Truglia and Troiano 2015)
- ▶ Mixed results in context where information is only available internally (Bennedsen et al. 2022, Gulyas et al. 2022)
- ▶ In contrast, pay transparency enhances gender equality in contexts where this information is publicly available (Baker et al. 2022, Obloj and Zenger 2022)

Mechanism 1: Performance comparisons



- ▶ There is little evidence that the gender pay gap distribution shrinks from the right-hand size over time.

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Mechanism 2.a: Public scrutiny

- ▶ 2018 and 2019: Two **YouGov** rankings of 1,342 (self-selected) firms
- ▶ **Women's Rankings** are based on women's answers to the question:
 - ▶ “Of which of the following brands do you have a positive/negative impression?”
- ▶ **Workforce Rankings** are obtained by asking both working men and women:
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	Women's Ranking (1)	Workforce Ranking (2)
Gender pay gap	-0.681* (0.380)	-0.789** (0.375)
Observations	1,807	1,813
Adjusted R^2	0.659	0.707
Year FE	✓	✓
GEO firm FE	✓	✓

Source: GEO, YouGov, 2018-19.

- ▶ **Firms publishing a larger gender pay gap obtain worse placements in both Rankings**
- ▶ The public availability of the GPG figures seems to have increased public scrutiny

Mechanism 2.b: Do most exposed firms drive the results?

- ▶ What does it mean to “be exposed to public scrutiny”?
- ▶ Hypothesis: firms that are more exposed to public scrutiny are likely to be firms that the public audience is more familiar with
- ▶ In turn, firms that spend a larger share of their budget on advertising are likely to be more renowned among the public audience
- ▶ Do firms that have traditionally spent more on advertising exhibit a larger response to the pay transparency policy?
- ▶ We exploit data on firms’ annual advertising costs provided by the Annual Business Survey

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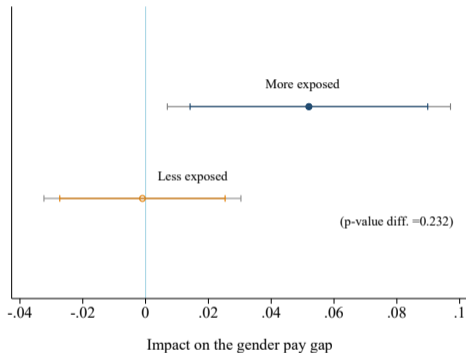
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- ▶ These results suggest that **firms that care more for their public image**, as proxied by their pre-policy advertising-to-sales ratio, **have a larger response to the policy**

Discussion and conclusion

1. Pay transparency reduces the gender hourly pay gap by 19 percent
 - ▶ Through reduction of men's pay: is this the desirable way?
(Mas 2017, Baker et al. 2022, Bennedsen et al. 2022, Blundell 2021, Cullen and Pakzad-Hurson 2021)
2. Public availability of information magnifies the disciplinary effects of the policy by enhancing public scrutiny
3. Still, pay transparency may not be suited to improve outcomes for lower-paid employees
4. We have identified short-term effects!

Thank You!

Appendix

Anecdotal evidence

- ▶ Some male CEOs cut their salary following the introduction of the policy:
 - ▶ "Johan Lundgren, EasyJet's chief executive, is taking a 4.6 percent pay cut to match the salary of his female predecessor" (*New York Times* 2018)
 - ▶ BBC: "Six high-profile male presenters have already agreed to pay cuts, including John Humphrys, Jeremy Vine and Nick Robinson" (*The Guardian* 2018)

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Who counts as an employee

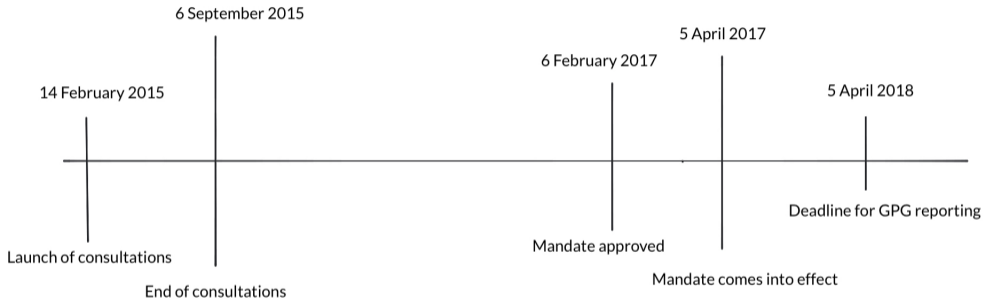
- ▶ Extended definition of employee:
 - ▶ Employees: those with a contract of employment
 - ▶ Workers and agency workers (those with a contract to do work or provide services)
 - ▶ Some self-employed workers (where they have to personally perform the work)
 - ▶ Each part time worker counts as one employee
 - ▶ Partners enter in employee headcount but not in GPG calculations

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Why 250 and other policies

- ▶ Firms with 250+ employees account for 0.1% of businesses, 40% of employment and 48% of turnover
- ▶ Potential rationale for choosing this threshold:
 - ▶ Lower bureaucratic costs to compute required statistics
 - ▶ Spillover effects to other firms (Johnson 2020)
- ▶ Other policies affecting only firms with 250+ employees
 - ▶ Since 2010: employees' right to request time off for training
 - ▶ Starting in 2020: Publication of pay gaps between CEO and median employee
 - ▶ only applies to publicly listed companies

The Timeline of the Mandate



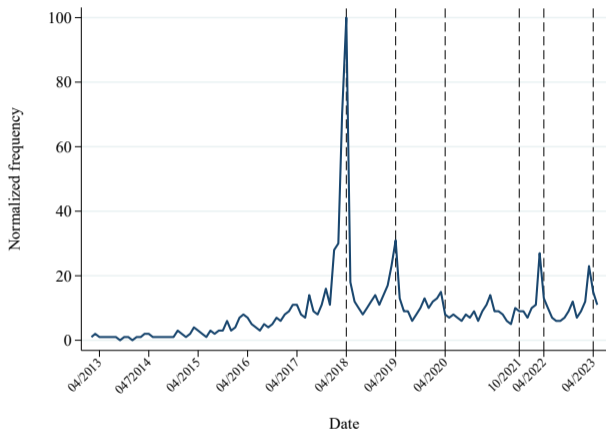
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Public gender equality indicators

	2017-18 (1)	2018-19 (2)	2019-2020 (3)	2020-21 (4)	2021-2022 (5)	2022-23 (6)	2023-24 (7)
Gender gap in median hourly pay (%)	9.2 (15.8)	9.5 (15.5)	10.4 (15.4)	10.2 (17.0)	9.7 (16.8)	9.3 (15.3)	9.0 (16.5)
Gender gap in mean hourly pay (%)	13.3 (14.9)	13.1 (14.2)	13.6 (15.0)	13.2 (15.3)	12.8 (15.4)	12.2 (14.4)	11.8 (15.2)
Gender gap in median bonus (%)	5.0 (1,400.2)	15.5 (295.4)	20.6 (112.4)	19.8 (270.5)	16.7 (289.3)	15.6 (166.9)	14.4 (1,637.0)
Gender gap in mean bonus (%)	22.0 (833.7)	32.1 (219.0)	36.0 (81.5)	35.2 (349.2)	32.5 (150.6)	31.8 (164.4)	29.6 (228.5)
% men receiving bonus	19.4 (36.3)	19.2 (36.7)	20.4 (37.5)	20.2 (37.2)	17.0 (38.2)	25.5 (37.6)	27.0 (38.0)
% women receiving bonus	17.2 (36.0)	17.2 (36.4)	18.2 (37.2)	18.1 (37.0)	15.0 (38.0)	24.3 (37.4)	25.9 (37.9)
% women lower quartile	55.7 (24.1)	55.4 (24.1)	57.0 (23.7)	56.3 (24.4)	56.6 (24.3)	56.8 (23.7)	56.4 (23.7)
% women lower-middle quartile	51.7 (26.1)	52.0 (26.2)	53.0 (25.7)	52.0 (26.2)	52.0 (26.1)	52.7 (25.6)	52.5 (25.4)
% women upper-middle quartile	46.0 (26.2)	47.0 (26.3)	47.3 (25.7)	46.7 (26.1)	46.8 (26.0)	47.5 (25.7)	47.3 (25.5)
% women top quartile	37.3 (24.4)	38.0 (24.5)	38.6 (23.9)	38.0 (24.5)	38.8 (24.2)	39.3 (24.0)	39.9 (23.8)
Observations	10,557	10,812	6,978	10,152	10,529	10,408	10,895

Source: UK Government Equalities Office (GEO).

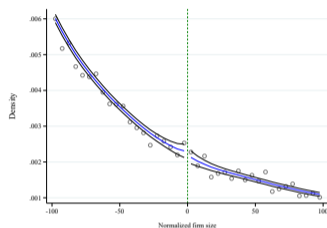
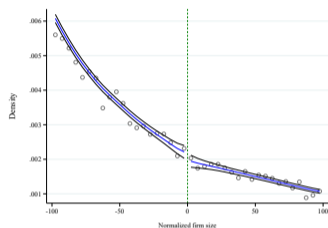
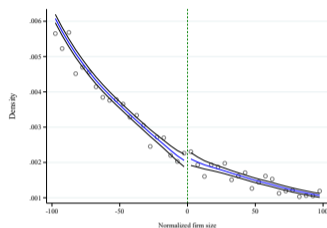
Google searches for "Gender pay gap"



- ▶ Public interest for the topic spikes at deadline
- ▶ Public interest has decreased over time

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Firm size density (BSD)



- ▶ Business Structure Database (BSD): administrative data-set on 99% of UK firms
- ▶ No visible jump at the threshold

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Employee-level data

- ▶ **Annual Survey of Hours and Earnings (ASHE):**
 - ▶ Employee-level panel data set covering 1% representative sample of working population
 - ▶ Employers' survey
 - ▶ Gender, firm id, and number of employees
 - ▶ Occupation, tenure, weekly and hourly wages, bonuses, hours, age, industry
 - ▶ Period considered (April) 2013-2021

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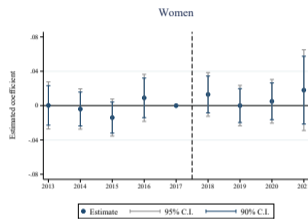
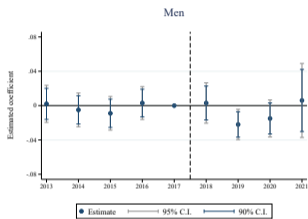
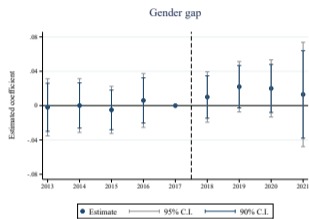
ASHE Summary statistics - pre-mandate period

	Treated men (1)	Control men (2)	Treated women (3)	Control women (4)
Hourly pay (£)	15.94 (14.24)	15.59 (11.68)	13.36 (8.87)	13.39 (10.70)
Weekly pay (£)	581.73 (533.46)	569.38 (429.76)	414.52 (307.33)	411.71 (316.99)
Weekly hours	36.41 (8.54)	36.67 (8.50)	30.69 (10.53)	30.49 (10.69)
Receiving additional payments	0.29 (0.45)	0.29 (0.46)	0.19 (0.39)	0.18 (0.38)
Additional payments per week (£)	26.05 (102.38)	26.08 (114.65)	10.07 (38.72)	9.47 (42.15)
Additional payments ph/Hourly base pay	0.04 (0.10)	0.04 (0.10)	0.02 (0.08)	0.02 (0.07)
Promotion	0.02 (0.14)	0.02 (0.13)	0.02 (0.14)	0.02 (0.14)
Bottom tercile	0.26 (0.44)	0.25 (0.43)	0.37 (0.48)	0.37 (0.48)
Middle tercile	0.33 (0.47)	0.33 (0.47)	0.23 (0.42)	0.26 (0.44)
Top tercile	0.42 (0.49)	0.42 (0.49)	0.40 (0.49)	0.37 (0.48)
Tenure in months	86.22 (97.05)	84.94 (96.06)	73.13 (80.05)	70.73 (79.61)
Leaving firm in t+1	0.28 (0.45)	0.28 (0.45)	0.29 (0.45)	0.28 (0.45)
Private sector	0.91 (0.29)	0.92 (0.27)	0.80 (0.40)	0.78 (0.41)
Covered by collective agreement	0.28 (0.45)	0.27 (0.44)	0.32 (0.47)	0.34 (0.47)
Observations	6,910	8,677	5,868	7,710

Source: ASHE, 2013-2017.

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Impact on promotions



- ▶ The slowdown in men's pay growth is partly driven by a reduction in men's probability of being promoted

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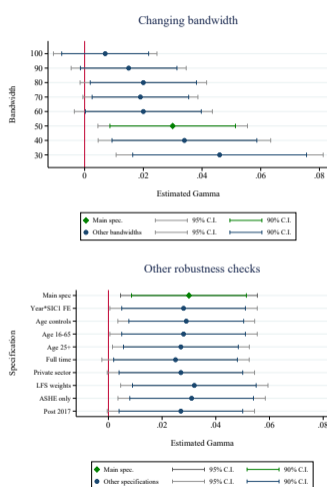
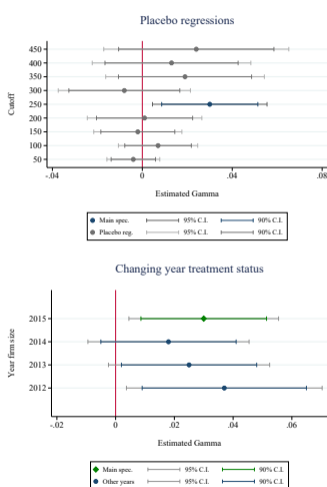
Impact on pay measures and components

	Log hourly pay	Log hourly basic pay	Additional payments / base pay	Promotion
	(1)	(2)	(3)	(4)
Treated firm*post	-0.029*** (0.009)	-0.028*** (0.009)	-0.003 (0.004)	-0.006 (0.007)
Treated firm*post*fem	0.030** (0.013)	0.032** (0.013)	-0.001 (0.005)	0.015 (0.010)
Observations	35,092	35,092	34,930	35,092
Adjusted R^2	0.894	0.897	0.529	0.005
Firm*Ind FE	✓	✓	✓	✓
Year*Reg*Fem FE	✓	✓	✓	✓
P-value Women Coeff	0.909	0.656	0.215	0.231
Men's pre-policy mean	15.94	15.26	0.04	0.02
Women's pre-policy mean	13.36	13.02	0.02	0.02

Source: ASHE, 2013-2021. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

- ▶ Women's pay increases by 3 p.p. more than men's pay after the introduction of the policy (19% reduction relative to pre-policy gender pay gap)
- ▶ Margins of adjustment: both contractual wages and allowances/bonuses
- ▶ Men experience a slowdown in promotions relative to women

Robustness Checks



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Impact on pay measures and hours worked

	Log hourly pay (1)	Log weekly pay (2)	Weekly hours (3)	Part-time (4)
Treated firm*post	-0.029*** (0.009)	-0.016 (0.011)	0.223 (0.191)	-0.008 (0.009)
Treated firm*post*fem	0.030** (0.013)	0.008 (0.020)	-0.515 (0.377)	0.028* (0.017)
Observations	35,092	35,092	35,092	35,092
Adjusted R^2	0.894	0.904	0.789	0.744
Firm*Ind FE	✓	✓	✓	✓
Year*Reg*Fem FE	✓	✓	✓	✓
P-value Women Coeff	0.909	0.632	0.370	0.250
Men's pre-policy mean	15.94	581.73	36.41	0.10
Women's pre-policy mean	13.36	414.52	30.69	0.34

Source: ASHE, 2013–2021.

*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

- ▶ Margins of adjustment: pay rather than hours

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Composition effects

	New hire (1)	Leaving firm in t+1 (2)	Bottom tercile (3)	Middle tercile (4)	Top tercile (5)	Log hourly pay (6)
Treated firm*post	0.015 (0.012)	-0.010 (0.017)	-0.010 (0.013)	0.015 (0.014)	-0.006 (0.015)	-0.012 (0.014)
Treated firm*post*fem	-0.003 (0.014)	0.044** (0.019)	-0.016 (0.020)	-0.006 (0.021)	0.022 (0.022)	0.021 (0.021)
Observations	46,098	44,367	48,589	48,589	48,589	48,589
Adjusted R^2	0.126	0.236	0.440	0.372	0.415	0.490
Firm FE	✓	✓	✓	✓	✓	✓
Year*Reg*Fem FE	✓	✓	✓	✓	✓	✓
P-value Women Coeff	0.348	0.053	0.075	0.557	0.302	0.534
Men's pre-policy mean	0.19	0.28	0.26	0.33	0.42	15.94
Women's pre-policy mean	0.22	0.29	0.37	0.23	0.40	13.36

Source: ASHE, 2013-2021. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

- ▶ Results point to a increase in women's separations
- ▶ + Change in the occupational distribution of women

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