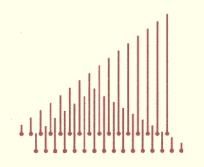
# Pay Equity after the Equality Act 2010: Does Sexual Orientation Still Matter?

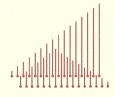
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National Institute of Economic and Social Research

## Motivation

- Uncertainty regarding size/direction of wage gaps by sexual orientation
- New legislation in the UK to tackle employer discrimination including with respect to sexual orientation
  - Impact in terms of % workplaces with equal ops policies (up from 69% to 75% 2004-11)
- Yet employer largely absent from the literature
  - Bias
  - No information on policies within workplace
- Able to contribute with WERS 2011



### Contribution

- First paper since 2010 Equality Act
  - Harmonised legislation on equal treatment
- Distinguishes between bisexuals and gays/lesbians
  - Plug and Berkhout (2004) for Netherlands were first
  - Proves to be important in Britain
- Linked employer-employee data
  - Comparisons within workplace
  - Helps identify role of workplace sorting
  - Occupational sorting only (Plug et al., 2014)
- Control for features of workplace
  - Avoids potential bias associated with workplace heterogeneity
  - Examine role for equal opp. policies/practices



# Findings

#### Men

- No gay/heterosexual wage gap
- Bisexuals earn 31% per hour less than heterosexuals
  - 20% less regression adjusted
  - Robust to detailed occupational controls and within workplace

#### Women

- No bisexual/heterosexual wage gap
- Lesbians earn 30% less than heterosexuals but NS difference where equal opportunities policy covering sexual orientation

## Wage gap literature

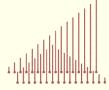
- Residual after observables
- Mechanisms
  - Employer taste-based v statistical
  - Co-workers
  - Customer
  - Segregation in search of tolerant employer
  - Competition?
- First paper on sexual preference mid-90s (Badgett, 1995)
- Hiring v wage conditional on hiring
  - Correspondence studies confirm hiring discrimination
    - Some variance by area (Weichselbaumer, 2013)
- Measurement difficulties
  - Identifying prejudice
  - Measuring 'orientation'

### Evidence

- Men
  - Hiring discrimination against gay men
  - Pay penalty for gay men (Wadsworth 2005 for 1996-2002). Wadsworth argues for new legislation
- Women
  - Hiring discrimination against lesbians
  - But lesbians earn more than observationally equivalent heterosexual women (Wadsworth 2005)
    - Carpenter (2008) for Australia is only exception
    - Selection?
- Taste-based?
  - Ideology/attitudes matter (Weichselbaumer, 2013; Ahmed et al., 2013)
  - Gays and lesbians sort in search of tolerance (Plugerer al. 2014)

### Measurement issues

- Sexual orientation
  - Hard to observe
  - Non-randomness of being 'out' or 'outed'
  - Defies simple classification
    - Self-reporting (used here)
    - Same sex partnership
    - Sexual behaviours
  - Rarely distinguish bisexuals from gay
  - Low Ns
- Omitted variables biases
  - Productivity
  - Employer



#### Data

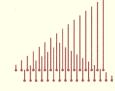
- Workplace Employment Relations Survey 2011
  - https://www.gov.uk/government/publications/the-2011workplace-employment-relations-study-wers
- Nationally representative survey of workplaces with 5+ employees n=2,680
  - Face-to-face interview, HR manager
- Linked to nationally representative survey of employees in those workplaces n=21,981
  - Self-completion questionnaire
- Surveyed between March 2011 and June 2012
- Survey weighting throughout
  - Probability of selection and non-response
- Wages: construct log hourly wage using banded wages and continuous hours

#### Sexual Orientation

- "Which of the following options best describes how you think of yourself...heterosexual or straight/ gay or lesbian; bisexual; other; prefer not to say"
- Of 21981 respondents:
  - 19741 heterosexual (93%)
  - 331 gay/lesbian (1.5%)
  - 123 bisexual (0.6%)
  - 80 other (0.5%)
  - 803 prefer not to say (3.3%)
  - 903 non respondents (1%)
- Similar to other studies (Wadsworth 2005: 334) though quite a bit of variance depending on question wording and population
- Final estimation: 18635 hetero, 212 gay/lesbian, 118 bisexual; 986 grouped as 'other'

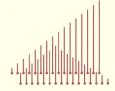
#### **Estimation**

- All employees with non-missing log hourly wages having dropped 167 cases with wages <£2 per hour or >=£200 per hour
- N=20,051 employees in 1,913 workplaces
- Separate estimates for women (N=11157) and men (N=8807) Sex missing in 87 cases retained in pooled estimates
- Models incorporating all sexual orientations. Then compare gays/lesbians with heterosexuals having dropped bisexuals/others; then compare bisexuals with heterosexuals having dropped gays/lesbians and others
- OLS with demo, job, workplace controls. Then workplace FE. Oaxaca-Blinder decompositions
- Sample weighting. Cluster SE's on workplace



## Mean Log Hourly Earnings

<b>Sexual Orientation</b>	All	Men	Women
Heterosexual	2.40 (.02)	2.51 (.02)	2.30 (.02)
Gay/Lesbian	2.48 (.05)	2.59 (.07)	2.29 (.06)
Bisexual	2.26 (.07)	2.24 (.11)	2.26 (.09)
Other	2.27 (.03)	2.35 (.05)	2.21 (.04)
All	2.40 (.02)	2.50 (.02)	2.29 (.02)
N	20,051	8,807	11,157



# Mean Log Hourly Earnings, Men and Women

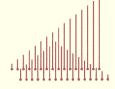
	OLS				<b>Workplace FE</b>			
	Raw	+demo	+job and wp	+ job qual/pay method	Raw	+demo	+job and wp	+ job qual/pay method
Gay	0.08*	0	-0.04	-0.05**	0.06	0.02	-0.02	-0.03
Bisexual	-0.14**	-0.11*	-0.1*	-0.1**	-0.18***	-0.13**	-0.1**	-0.11**
Other	-0.13***	-0.06**	-0.04*	-0.04*	-0.02	0	0	0
r2	0	0.26	0.54	0.55	0.44	0.51	0.67	0.68

## Mean Log Hourly Earnings, Men only

	OLS				<b>Workplace FE</b>			
	Raw	+demo	+job and wp	+ job qual/pay method	Raw	+demo	+job and wp	+ job qual/pay method
Gay	0.08	0.02	-0.03	-0.04	0.03	0.04	0	-0.01
Bisexual	-0.27**	-0.28***	-0.18***	-0.17***	-0.22***	-0.2**	-0.15**	-0.14**
Other	-0.16***	-0.07	-0.02	-0.02	0.02	0.06	0.04	0.04
r2	0	0.26	0.6	0.62	0.52	0.58	0.77	0.78

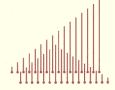
## Mean Log Hourly Earnings, Women only

	OLS				Workplace FE			
	Raw	+demo	+job and wp	+ job qual/pay method	Raw	+demo	+job and wp	+ job qual/pay method
Gay	-0.01	-0.02	-0.03	-0.04	0	0.01	-0.03	-0.05
Bisexual	-0.04	0.02	-0.05	-0.06	-0.13	-0.08	-0.07	-0.08
Other	-0.09**	-0.04	-0.05*	-0.05*	-0.07**	-0.04	-0.04	-0.05*
r2	0	0.23	0.5	0.51	0.48	0.53	0.66	0.67



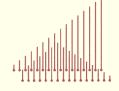
### Oaxaca-Blinder Decomposition of Bisexual-Heterosexual Log Hourly Wage Gap Among Men

Model	Explained	Unexplained	% unexplained
(1) Demographics	02 (0.19)	.28 (4.45)	106
(2) As (1) + job and workplace	.08 (0.74)	.18 (2.84)	68
(3) As (2) + job quality and pay methods	.09 (0.87)	.17 (2.80)	64



# Employee Coverage by Sexual Orientation Equal Opportunities Policies

	Monitors recruitment and selection by sexual orientation:					
Equal	No	Yes	Total			
Opportunities						
Policy Mentioning						
Sex Orientation:						
No	19	<1	19			
Yes	60	21	81			
Total	79	21	100			



# Employee Opportunities Policies and the Lesbian Log Hourly Wage Gap

Gay	Raw	+ <b>demo</b>	+job and wp	+ job qual/pay method
•	-0.27**	-0.24***	-0.20***	-0.24***
Equal Ops Policy	0.15***	0.10***	0.05**	0.04**
Equal Ops and Application Procedure	0.32***	0.19***	0.08***	0.08***
GayXequal ops procedure	0.28*	0.25***	0.18**	0.22***
GayXequal ops and application procedure	0.34**	0.26***	0.23***	0.27***
r2	0.03	0.24	0.5	0.51

# Conclusions (1)

#### Men

- No gay/heterosexual wage gap
  - Benefiting from changing attitudes? (Clark and Sevak (2013)
- Bisexuals earn 31% per hour less than heterosexuals
  - 20% less regression adjusted
  - Robust to detailed occupational controls and within workplace
  - First paper to find such a gap why confined to men?

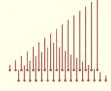
#### Women

- No bisexual/heterosexual wage gap
- Lesbians earn 30% less than heterosexuals but NS difference where equal opportunities policy covering sexual orientation

# Conclusions (2)

#### Size of effects

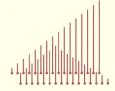
- Potential lower bound estimates
  - Classical measurement error in identifying sexual orientation imparting downward bias (though some possibility of upward bias)
- Can't indulge taste to discriminate where not 'out'
  Impact of Policy
  - Raising costs of taste-based discrimination? Or capturing otherwise unobserved 'tolerance'
  - Why confined lesbian/heterosexual wage gap?
  - Why do these results for women differ so much from those in the rest of the literature?
    - It is not the addition of workplace controls
    - Effects remain within workplace
  - These conditional associations are not causal



# Conclusions (3)

#### Workplace segregation

- Workplace FE make little difference to estimates
- So gaps in earlier studies perhaps not driven by workplace unobservables
- Workplace segregation not related to size of wage gap Compensating differentials
  - Introduction of job quality makes little difference
  - Wage penalties are not due to compensating wage differentials



## Sexual Orientation Raw Data

Sexual	I		Female				
preference		No	Yes	Missing		Total	
Hetero		8,156	10,405	74		18,635	
Gay or lesbian	ı	190	120	2	I	312	
Bisexual	1	51	65	2	l	118	
Other	ı	410	567	9	ı	986	
	-+-				+-		
Total	ī	8,807	11,157	87	I	20,051	

