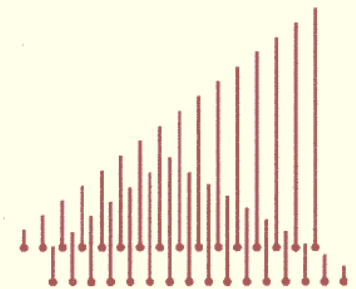


# Pay Equity after the Equality Act 2010: Does Sexual Orientation Still Matter?

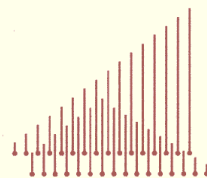
Alex Bryson (NIESR, CEP)  
ESPE, Braga  
21st June 2014



National Institute  
of Economic and  
Social Research

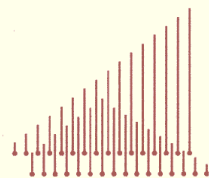
# Motivation

- 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



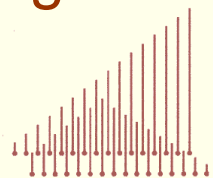
# Findings

## 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

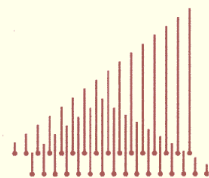
## Women

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



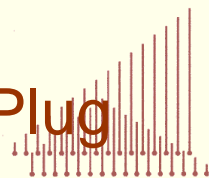
# Wage gap literature

- 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'



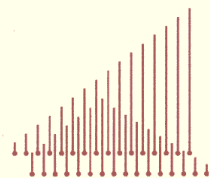
# Evidence

- 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 (Plug et 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

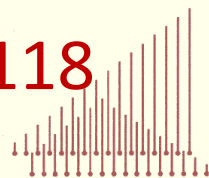
- Workplace Employment Relations Survey 2011
  - <https://www.gov.uk/government/publications/the-2011-workplace-employment-relations-study-wers>
- Nationally representative survey of workplaces with 5+ employees n=2,680
  - Face-to-face interview, HR manager
- Linked to nationally representative survey 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





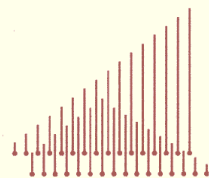
# Sexual Orientation

- “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’



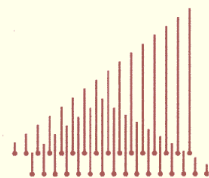
# Estimation

- All employees with non-missing log hourly wages having dropped 167 cases with wages  $<£2$  per hour or  $\geq£200$  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



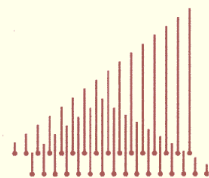
# Mean Log Hourly Earnings

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



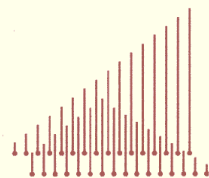
# Mean Log Hourly Earnings, Men and Women

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



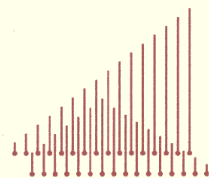
# Mean Log Hourly Earnings, Men only

	OLS				Workplace FE			
	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



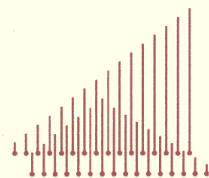
# Mean Log Hourly Earnings, Women only

	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



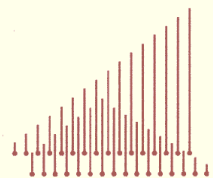
# Oaxaca-Blinder Decomposition of Bisexual-Heterosexual Log Hourly Wage Gap Among Men

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

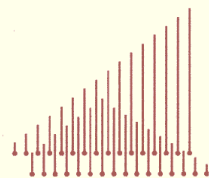
	<i>Monitors recruitment and selection by sexual orientation:</i>		
<i>Equal Opportunities Policy Mentioning Sex Orientation:</i>	No	Yes	Total
No	19	<1	19
Yes	60	21	81
Total	79	21	100





# Employee Opportunities Policies and the Lesbian Log Hourly Wage Gap

	<b>Raw</b>	<b>+demo</b>	<b>+job and wp</b>	<b>+ job qual/pay method</b>
Gay	-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



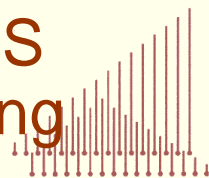
# Conclusions (1)

## 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



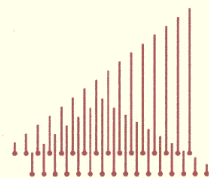
# Conclusions (2)

## 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



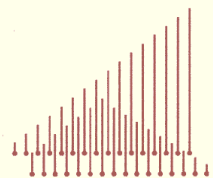
# Conclusions (3)

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

