

<b>Institution:</b> University of York
<b>Unit of Assessment:</b> 19, Business and Management Studies
<b>Title of case study:</b> Measurement and Importance of the Gender Earnings Gap in the UK
<p><b>1. Summary of the impact</b> (indicative maximum 100 words)</p> <p>“Gender equality in employment is recognised by policy makers and advisors (such as the Low Pay Commission) as an extremely important policy area.” (Factual statement 1. Chief Economist and Deputy Secretary, Low Pay Commission); affecting as it does, all employees in the UK labour market. Research at the University of York analyses the gender wage gap at a national level, making a new contribution to the understanding of wage inequality in the UK. The three major stakeholder government departments (Low Pay Commission, Government Equalities Office, and Department for Business, Innovation and Skills) have used the research findings and policy recommendations in their wage policy development to reduce the gender wage gap in the UK. The report was personally identified by the Minister for Employment Relations as making an important contribution to the development of policy.</p>
<p><b>2. Underpinning research</b> (indicative maximum 500 words)</p> <p>Government policy aimed at reducing the size of the gender earnings gap in Britain is firmly grounded in evidence-based research. In recognition of this, it is important that analysis is carried out on comprehensive and representative data. The Workplace Employment Relations Survey (WERS) dataset is unique in providing data on a large nationally representative sample of workers (male and female) and workplaces (private and public sector) across the UK, allowing the research to provide a comprehensive recent picture for the UK labour market and for the policy conclusions to be applicable at a national level.</p> <p>The research was carried out between October 2005 – December 2008 by Karen Mumford and Peter N Smith, both at the University of York (where they have worked since 1995). The initial analysis reported in Mumford and Smith (2007) exploits the linked employee and workplace data provided in WERS. The research shows that a significant part of the substantial female earnings gap (a gap of more than 20%) can be explained by observable worker and workplace characteristics. The research employs econometric methods for wage modelling that include a workplace fixed effect in addition to personal characteristics associated with individual's earnings. Evidence developed from estimates of these models for gender-based workplace and occupational segregation as partial explanations of the earnings gap is presented. Having allowed also for individual worker characteristics there remains a substantial within-workplace and within-occupation gender earnings gap of 11%. The contribution of all of these factors, as well as the earnings gap itself, is shown to differ significantly across sectors of the labour market. The empirical association between the workplace, occupational segregation, and the gender wage gap was a new contribution to the understanding of wage inequality in the UK. However, there remains a substantial residual gender earnings gap between male and female employees.</p> <p>This research was positively received by a number of government departments and was subsequently developed further with support from the Department for Trade and Industry (DTI). This second part of the research examines full and part-time, male and female employees in the WERS data. Allowance is explicitly made for the possibility of both workplace and occupational female segregation across each group and is reported in Mumford and Smith (2009). Individual worker characteristics and workplace characteristics are shown to explain much of the earnings gaps examined. Within gender groups, the striking difference between full and part time employees is that full-timers tend to work in higher paying occupations than do part-timers. A further new result is that female workplace segregation contributes significantly to the full/part time earnings gap of both males and females. Part-time employees work in more feminised workplaces and their earnings are lower. There remains, moreover, a substantial residual gender earnings gap between male and female employees of 10% for full-time and 11% for part-time employees. The research</p>

**Impact case study (REF3b)**

papers both concluded that there was a role for more vigorous application of comparable wage pay legislation in lowering the gap within and across UK workplaces and that the current Equal Pay legislation was not fully effective. Reducing the overall wage disparity between men and women (for part-time as well as full-time employees) requires complementary policies addressing occupational segregation both within and across workplaces. These policies include reducing wage disparities for equally productive workers and improving access to women's employment in better paying jobs.

The findings were presented at conferences in 2005 and 2006, including at the WPEG (Work, Pensions and Labour Economics Group) annual meetings sponsored by the Department for Work and Pensions (DWP). This conference is attended by many relevant civil servants in DWP and related government departments including DTI-BERR and the Low Pay Commission. Interest in the early results of the research then led to a part of the research, focused on full and part-time employees, being funded by the Department for Business, Enterprise and Regulatory Reform Employment Relations in 2007. Presentations to staff of the DTI-BERR were made in the DTI Employment Relations Seminar Series on Tuesday 5 June 2007. Further presentations of the research were made at the 2007 WPEG conference, the 2007 Low Wage Employment Network (LoWER) Conference (sponsored by the European Commission), and the Office of Manpower Economics 2008.

**3. References to the research** (indicative maximum of six references)

Mumford, K.A. and P.N. Smith (2007a), "The gender earnings gap in Britain: Including the workplace", *Manchester School*, 75(6); 653-672. DOI: 10.1111/j.1467-9957.2007.01040.x

Mumford, K.A. and P.N. Smith (2009), "What determines the part-time and gender earnings gaps in Britain: Evidence from the workplace", *Oxford Economic Papers*, 61; i56-i75. DOI: 10.1093/oeq/gpn041 [Initial version: Mumford, K.A. and P.N. Smith (2007b), "Part-time work and the gender pay gap in British workplaces: Findings from the 2004 Workplace Employment Relations Survey", Department for Business, Enterprise and Regulatory Reform Employment Relations Research Series No. 82, London.]\*

Research grant: Department for Business, Enterprise and Regulatory Reform Employment Relations, "Part-time work and the gender pay gap in British workplaces: Findings from the 2004 Workplace Employment Relations Survey, Jan 2007, (K.A. Mumford and P.N. Smith), at the University of York. (*Available on request*)

The *Manchester School* and *Oxford Economic Papers* are both rated as 3\* in the 2010 Association of Business Schools journal list.

\*[The Department for Trade and Industry (DTI) subsequently became the Department for Business, Enterprise and Regulatory Reform (BERR) which then became an important constituent of the more recently formed Department for Business, Innovation and Skills (BIS).]

**4. Details of the impact** (indicative maximum 750 words)

The research shows that gender pay gaps are higher in feminised workplaces in low paying sectors of the economy and that this is especially true for part-time employees. The evidential association between the workplace, occupational segregation, and the gender wage gap was a new contribution to the understanding of wage inequality in the UK.

"The identification of the importance of occupation segregation as one of the chief factors was particularly important. It suggested a policy approach that was aimed at widening out employment opportunities for both women and men in occupations where they were under-represented." (Factual statement 2, Deputy Director Labour Market Analysis and Minimum Wage Team, Department for Business, Innovation and Skills).

**Impact case study (REF3b)**

In giving evidence to and responding to the report of the Parliamentary Trade and Industry Committee [1b], pg 118, Pat McFadden, Minister for Employment Relations, BERR wrote: “in terms of policies to target closing the gender pay gap...I now see BERR as contributing in at least four key areas: first, through...major research...to understand the gender pay gap where the Department will soon publish a study [Mumford and Smith (2007b)].”. The Committee’s report identified the view of the government that the research was the key evidence for the assessment of the current situation for the gender pay gap [1a], pg 7. The government also identified tackling occupational segregation as a crucial part of ensuring equality of opportunity in their formal response to the Committee [1c], pg 1. This view of the importance of our work is reflected by further government departments developing policy in this area.

“A better understanding of the gender pay gap, based on your work ... has ensured that broader government policy development ... is properly evidence based and provides the basis on which we can understand where best to target limited policy resources. The understanding of the impact of occupational segmentation as a driver has informed recent internal analytical work in GEO on understanding the impact of women and men in the recessions (the gender business cycle) which has been well received and discussed by equalities Ministers across government.” (Factual statement 3, Chief Economist and Head of Evidence, Government Equalities Office.)

The research results and policy recommendations were included in a series of influential reports including the Office for National Statistics long term assessment of the pay gap [2, pg 33], the report of the National Equality Panel in 2010 [3, pg 231] and the report for the Government Equalities Office by Olsen et al, also in 2010 [4, pg 4]. More recently, the research is an important part of the Equality and Human Rights Commission review of the evidence base [5, pg 19-23 and 6], the Equality Working Group Overview Report [7, pg 29-30], and in a review by the Welsh Government [8, pg 70].

The research conclusions were explicitly used in these reports to support subsequent policy developments in the UK. These include more extensive application and stronger enforcement of the National Minimum Wage in low paying sectors, and recent recommendations by the Low Pay Commission (LPC) for greater compliance, especially to apprenticeships, (including government to more actively communicate both the minimum wage rates themselves, and rights and obligations under the National Minimum Wage, across workplaces); clarification of the consequences of equal pay legislation across workplaces and provision for improved flow of information between employees of different gender and across workplaces with the introduction of the Equal Pay Act (2010); and providing Employment Tribunals with the capacity within workplaces to impose pay audits on employers who are found to have discriminated because of gender in pay setting (a component of the Modern Workplaces response). Evidence from the LPC in 2013 [9; pg 39] shows that the gender pay gap amongst full time employees has narrowed for the lowest paid decile from 7.8% in 2007 to 5.6% in 2012 affecting some 712,000 working women; and from 10.8% to 8.6% at the median for the female workforce as a whole.

“Professor Mumford and Professor Smith’s research on the gender pay gap has provided extremely useful insights, especially their illumination of the nature of occupational segregation in the UK. This has helped identify particular sectors of low pay and help us and HMRC to focus stronger enforcement of the minimum wage in certain workplaces. Our recommendations have also led to a considerable increase in the pay of women relative to men at the bottom end of the pay distribution. Gender equality is an extremely important policy area. Their contribution has also made a very considerable impact in terms of its reach and significance across government, including DTI (now BIS), HMRC and various bodies responsible for equalities, such as the Government Equalities Office and the Equality and Human Rights Commission.” (Factual statement 1. Chief Economist and Deputy Secretary, Low Pay Commission.)

**5. Sources to corroborate the impact** (indicative maximum of 10 references)

*Factual statement 1:*

Chief Economist and Deputy Secretary, Low Pay Commission (LPC). 9/11/2012.

*Factual statement 2:*

Chief Economist and Head of Evidence, Government Equalities Office (GEO). 6/11/2012.

*Factual statement 3:*

Head of Labour Market Analysis and Minimum Wage Branch, Department of Business, Innovation and Skills (BIS). 9/11/2012.

*Additional impact sources*

- [1] House of Commons Business, Enterprise and Regulatory Reform Committee (2008). *Jobs for the Girls: Two Years On second report of session 2007-08:*
  - (a) Vol. 1: Report. House of Commons papers 291-I
  - (b) Vol. 2 Oral and written evidence. House of Commons papers 291-II
  - (c) Government Response to the Report. House of Commons 634. 2007-08. London: The Stationary Office, EV118.
- [2] Barnard, A. (2008) *Modelling the gender pay gap in the UK: 1998 to 2006, Economic & Labour Market Review, Office for National Statistics, Vol 2, No 8, August, pg 23.*
- [3] Hills, John, Mike Brewer, Stephen Jenkins, Ruth Lister, Ruth Lupton, Stephen Machin, Colin Mills, Tariq Modood, Teresa Rees, Sheila Riddell (2010), *An anatomy of economic inequality in the UK: Report of the National Equality Panel, Government Equalities Office, London, pg 231.*
- [4] Olsen, Wendy, Vanessa Gash, Leen Vandecasteele, Pierre Walthery and Hein Heuvelman (2010), *The Gender Pay Gap in the UK 1995–2007: Part 1 – Research report Government Equalities Office February, London, pg 4.*
- [5] Metcalf, H. (2009), "Pay gaps across the equality strands: a review", *Equality and Human Rights Commission Research Report No. 14, London, pg 19-23.*
- [6] *Equal pay / pay gaps reading list, Equality and Human Rights Commission and EqualPayPortal, 2012.*
- [7] *The Gender Pay Gap - A Literature Review, JNCHES Equality Working Group, New JNCHES Equality Working Group Overview Report January 2011, pg 29-30.*
- [8] *Regional and Local Market Pay in Wales: Evidence Summary Submitted for Consideration by the Pay Review Bodies, Welsh Government, May 2012, pg 17.*
- [9] *National Minimum Wage: Low Pay Commission Report, April 2013.*