Moving on up?
Ethnic minority women
and work

PAY GAPS: THE POSITION OF ETHNIC MINORITY WOMEN AND MEN

Lucinda Platt

University of Essex

EUROPEAN UNION
European Social Fund

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Women. Men. Different. Equal.
Equal Opportunities Commission

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About the investigation

In October 2005, the Equal Opportunities Commission launched '***Moving on up? Ethnic minority women at work***', a GB wide investigation into the participation, pay and progression of ethnic minority women in the labour market. The overall aim of the investigation is to understand more about the diverse experiences and aspirations of ethnic minority women in relation to work, including barriers to progress, so that effective action can be taken to improve their labour market prospects. The focus is on women, as there is insufficient labour market evidence available that seeks to understand how gender, race and faith intersect in the labour market. The investigation focuses particularly, though not exclusively, on Bangladeshi, Pakistani and Black Caribbean women. Pakistani and Bangladeshi women are included because they have the lowest rates of employment of any other ethnic group, and Black Caribbean women because they are under-represented in senior level jobs, despite being more likely than white women to work full-time. A focus on these three groups has meant that resources can be channelled more effectively for depth research and analysis, and in order to avoid over generalisations about ethnic minority women.

The EOC has commissioned new research and analysis to support the investigation, including the voices of women at every stage.

Moving on up? is a statutory investigation under the Sex Discrimination Act 1975. The legislation gives the EOC the power to undertake general formal investigations into deep-seated issues of gender inequality or discrimination, and to make recommendations to those in a position to make changes, including Government.

This report is one of a series of research reports commissioned for the ***Moving on up*** investigation, which is supported by the European Social Fund. We will publish all the research on our website at www.eoc.org.uk. Please email bme@eoc.org.uk or phone our helpline if you require a printed copy of the interim report.

For more information on the investigation visit our website www.eoc.org.uk/bme

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EXECUTIVE SUMMARY

This report compares the average hourly earnings for full-time and part-time employees by ethnic group and gender, and summarises the extent of the pay gaps suffered by women from different ethnic groups and minority group men relative to the pay of white British men. It explores the gaps for white women and for men and women from Indian, Pakistani, Bangladeshi, Black Caribbean and Black African ethnic groups.

The report also considers some of the possible reasons for differences in pay across ethnic groups and between the sexes, including: sector of employment, history of interruptions to employment and of part-time work, regional variations, variation in skills and experience, and the role of discrimination in employment. It specifically considers differences in educational qualifications and compares the pay gaps for those with the same broad level of qualifications.

KEY FINDINGS

Pay gaps in hourly full-time pay

There is a substantial full-time, hourly pay gap for women (16-59) from ALL ethnic groups relative to White men, and for all minority group men (16-64) except for Indian men. However, the average hourly pay gap for minority women (13 per cent) is almost three times as high as the average hourly pay gap for minority men (5 per cent).

Pakistani women have the highest pay gap among women at 28 per cent. This compares with the pay gap among white British women of 17 per cent. And Bangladeshi men have the highest full-time pay gap among men (39 per cent).

Indian (W=£10.28/M=£12.45), Pakistani (W=£8.31/M=£9.32), and Black African (W=£9.38/M=£10.17) women, as well as White women, are paid less per hour in full-time work than men from the same ethnic group. Black Caribbean women (W=£10.50/M=£10.34) are paid marginally more per hour than Black Caribbean men.

Assessing the links between ethnicity, gender and pay is complicated by the fact that high percentages of ethnic minority women live in London where average pay is higher than in other parts of the country, and work in the public sector, where the pay gap is smaller between women and men. Moreover, the proportions of women who are in paid employment vary substantially by ethnic group, as does the age profile of those in paid employment, meaning that women with very different characteristics are being compared. In addition, the tendency to work part-time varies with ethnicity and

part-time work has a long term effect on women's earnings even if they subsequently return to full-time work.

Pay gaps among those qualified to level 3 or above (hourly full-time pay)
Higher qualifications (level 3 and above) make little difference to the pay gaps suffered by women from all ethnic groups, relative to White men qualified at this level. However, they do make a difference to most groups of ethnic minority men. Being higher qualified decreases the pay gap for most groups of men compared to higher qualified white British men, though for Black African men the pay gap actually increases (to 15 per cent). Comparing the pay gap among higher qualified women compared to higher qualified white men, results in a very similar pay gap for most groups of women: the pay gaps are 26 per cent among Pakistani women, 23 per cent among Bangladeshi women and 19 per cent among Black African women. For white women the gap is 15 per cent.

Pay gaps in full-time, hourly pay among 25-54 year olds
When you remove the younger and older workers from the analysis, and focus upon the 25-54, age group, full-time hourly pay gaps alter for all ethnic minority women, but not White women (17 per cent). The pay gap increases for Indian (15 per cent), Black African (23 per cent) and Black Caribbean (13 per cent) women, and decreases marginally for Pakistani (25 per cent), and Bangladeshi (20 per cent) women.

Pay gaps at different points in earnings distribution
Among White British, Indian, Black Caribbean and Black African women, the pay gap increases as they earn more. However, for Pakistani and Bangladeshi women, the gap stays consistently high in that they are equally disadvantaged at the lower and upper end of earnings distribution.

Pay gaps in full-time, weekly pay among those of working age (16-59/64)
Weekly pay takes account not only of the hourly pay but also the number of hours worked (excluding part-time working). Weekly pay gaps among women tend to be higher than hourly pay gaps. The patterns for men remain similar to those for hourly pay gaps.

There are very substantial full-time, weekly pay gaps for working age women from ALL ethnic groups relative to White men, and for all minority group men of working age except for Indian men. The average weekly pay gap for minority women (20 per cent) is over three times as high as the average weekly pay gap for minority men (6 per cent).

The estimated pay gaps for Black Caribbean women double from 9 per cent (full-time hourly pay) to 18 per cent (full-time weekly pay). The weekly pay gap figure is much higher for Black Caribbean women than men (11 per cent). The weekly pay gaps also show an increase on hourly pay gaps for Pakistani women (35 per cent) and Bangladeshi women (33 per cent), which compare with a weekly pay gap of 24 per cent among White British women. Among men, Bangladeshi men again have the highest weekly pay gap at 46 per cent.

Indian (W=£397/M=£515), Pakistani (W=£316/M=£380), Black African (W=£368/M=£430) and Black Caribbean (W=£397/M=£429) women as well as white women (W=£369/M=485) are paid less per week, full-time than men from the same ethnic group.

1. INTRODUCTION

In 2000, the Equal Opportunities Commission (EOC) set up the Equal Pay Task Force to investigate the enduring pay gap between men and women that has persisted despite the existence of equal pay legislation since the 1970s.[1] The report of this working group clarified the understanding of the meanings and sources of the gender pay gap (see section 1.1, for definitions and data), and identified a strategy for tackling gendered inequality in pay. From latest figures, women in full-time work earn around 17 per cent less per hour than men in full-time work on average; but many women work part-time and women in part-time work earn around 38 per cent less per hour than men in full-time work (EOC, 2006). The enduring pay gap between women and men was recently headline news with the publication of the report by the Women and Work Commission on the gender pay gap on 27th February 2006, and the declaration that the gap was 'the worst in Europe' (Women and Work Commission, 2006).

However, there is, obviously, great variation in the pay gap across the population and within groups. For example, the gender pay gap is lower in Wales than across Great Britain; and individual pay gaps vary substantially across industries and occupations. There is already extensive evidence that Britain's minority ethnic groups are disadvantaged in the labour market. The issue of low pay experienced by minority ethnic groups was highlighted by the Low Pay Commission in its first report on the minimum wage (Low Pay Commission, 1998), and ethnic inequalities in pay have been extensively investigated in research. (For example, for recent research on ethnic (and migrant) pay differentials see Blackaby et al. 2002, 2005; Dustmann and Fabbri, 2005; Shields and Wheatley Price, 1998; Lindley, 2002; Heath and Cheung, 2006). The employment disadvantage of women from minority ethnic groups has been identified as a 'double whammy' (TUC, 2006).

The great disparities in pay among migrant workers have also been highlighted, with some groups of 'new immigrants' having higher than average and some having lower than average pay (Kyambi, 2005); and the problem of low pay in London has been associated in part with high rates of part-time work and with low pay among London's migrant workers. The issues of pay and labour market experience among those who are recent immigrants are complex. There is evidence that differences in employment and pay among immigrants narrow over time and tend, with time since migration, to reflect more closely their qualifications and experience. There is, however, substantial variation in the extent to which such 'economic assimilation' takes place and it would seem to be linked to the extent to which immigrants belong to racialised

[1] The Equal Pay Act 1970 came into operation in 1975 at the same time as the Sex Discrimination Act 1975.

ethnicities (Bell, 1997, Frijters et al, 2005). Moreover, the route by which immigration occurs will have a substantial impact on the anticipated labour market experience, with forced migrants facing a very different set of opportunities and constraints than those who have arrived to take up a pre-agreed job. Given the diversity in experience among recent immigrants, and the complexity of the different processes, as well as the sheer number of different national origins concerned, the extent to which an analysis of pay gaps for new immigrant groups can provide meaningful information is questionable.

In addition, there are also issues in terms of conception and measurement in whether country of birth is seen as the critical factor in investigating the labour market outcomes of different minority ethnic groups, or whether self-identified ethnicity is the focus of interest. Clearly many of the UK's minority groups are UK-born, with increasing numbers from not only the 'second generation' but also the third or subsequent generations. For these, their country of birth gives us no information about the relationship between ethnicity and labour market experience. The use of self-reported ethnicity also allows an individual's identification – and all the factors that have shaped that identification, including the responses of others – to represent the key point of differentiation, rather than an ascriptive process relating to country of birth. This report therefore focuses on the six largest ethnic groups in Great Britain according to the standard classification: White British, Pakistani, Indian, Bangladeshi, Black African and Black Caribbean.[2] The proportions of these groups who are UK-born varies with the group (see Table 2.6, below), and may be an additional factor in net pay gaps (as was indicated in preliminary analysis). Nevertheless, the analysis has not been distinguished the group members according to country of birth, as the core aim of this report is to summarise ethnic pay gaps – and then to discuss all the factors that may contribute to the existence and scale of such gaps, which, for some, will include being born outside of the UK.

Using recent data from the quarterly *Labour Force Survey*, this report calculates pay gaps for both men and women, using a standard reference category of White British men. It would be inappropriate to use the standard reference category of all men, as this includes ethnic minority men. Thus, all pay gaps are calculated relative to the earnings of White British men. The report identifies how gender pay gaps vary with ethnicity of the woman, as well as summarising the scale of ethnic labour market disadvantage for those in employment, both men and women, and the way this

[2] The full range of measured ethnic groups in the data include in addition, four mixed groups, each individually too small in number for reliable estimates, a Chinese group, which also faces the analytical problem of small numbers in the data and four 'other' groups, which represent residual, heterogeneous categories which thus do not allow for meaningful analysis. The Irish category did not receive the level of anticipated response and there is some debate over whether it adequately captures the intended population. White Irish has therefore also been excluded from the analysis in this report.

differs by the sex of the earner. The next section discusses in more detail the concept of the pay gap, and the approach to calculating ethnic pay gaps in this report (further details of the methodology are included in the appendices). It then summarises the structure of the report.

1.1 Definitions

What do we mean by the pay gap? According to the EOC, 'The gender pay gap is determined by calculating women's overall average pay as a percentage of men's. So, for example, the pay gap is said to be 17% where women's pay is 83% of men's. The gender pay gap is said to 'narrow' as women's average pay moves closer to men's. To arrive at a figure for the gender pay gap most official statistics compare the average hourly earnings of men and women working full-time, as the best way to compare 'like with like' (EOC, 2006).

This involves treating men's average hourly (full-time) pay as the starting point and calculating the ratio of women's average hourly pay to that amount. If there were no gap, that ratio would be 1; if there is a gap, the ratio is less than 1 and if women were to have an advantage the ratio would be more than 1. To give a percentage gap, therefore, that ratio is subtracted from 1 and is multiplied by 100. For example, according to the data used in this study, men's average full-time hourly earnings over 2001-2005, were £11.57 and women's were £9.73. The gender pay gap, according to these figures was, therefore (1-[9.73/11.57])*100= c.16%.[3] This report extends that calculation to allow the calculation of *ethnic* pay gaps by gender. Thus the reference point becomes the hourly (full-time) earnings of White men, and the earnings of all other combinations of ethnic group and sex are compared with that reference point.
Ethnic-gender pay gaps are thus calculated as = (1-[mean hourly earnings of sex and group of interest/mean hourly earnings of White men in full-time work]) * 100. These gaps for men and women from different ethnic gaps can be seen to vary substantially in size. However, given that pay gaps are aggregates stemming from the combination of all the factors that lead to lower pay, it does not follow that the size of the pay gap is necessarily proportional to the amount of labour market discrimination faced by the different groups. Instead the gaps reveal how different characteristics and experiences interact with labour market discrimination to result in net gains or losses in pay.

[3] The pay gap for all women relative to all men cited by the EOC was 17.1%. The reason why the figures are not identical is because they use different sources: this paper uses the Labour Force Survey [LFS] rather than the Annual Survey of Hours and Earnings [ASHE], which is used for overall gender pay gaps, as the former contains ethnic group information. Data from the LFS have been aggregated over 4 years in order to gain sufficient sample sizes for describing pay gaps. Olsen and Walby (2004) also calculated a gender pay gap of 16% using the LFS for 2002, which contrasted with a higher pay gap (of 19%) using the New Earnings Survey, the predecessor of ASHE, also for 2002. For further details of the calculation of the pay gap in this report see the Technical Note in the appendices, below.

According to the EOC (http://www.eoc.org.uk/Default.aspx?page=15613#1410), the sources of the gender pay gap can be found in three main areas:

> *Discrimination in pay systems: Women being paid less than men for doing the same job as a man or a job requiring the same level of skill, effort and responsibility as a job done by a man.*
> *Occupational segregation: large groups of women are concentrated in a narrow range of low paid jobs such as cleaning, catering and caring.*
> *Caring responsibilities: the responsibility for looking after children and other relatives falls on women more than men, which affects their progression at work.*

In this report we discuss the potential reasons for different pay gaps according to ethnic group and sex in more detail, below. However, it is possible to see how these three broad areas of discrimination, occupational segregation or concentration (and the sector in which employment takes place), and different patterns of life-time earning and interruptions of earning can also be extended to ethnic group employment experiences to help us understand variations in pay. Moreover, the 'job-relevant' characteristics that individuals bring to the labour market can vary systematically with ethnic group and gender; in particular we know that levels of qualifications in the population show variation across ethnic groups and by sex, which will affect the pay levels that individuals can achieve. We consider this point of educational levels explicitly in this report by examining the gaps for the more and less well-educated by ethnic group and sex, as well as discussing the contribution of educational qualifications more generally to the overall pay gaps. Moreover, it is important to remember that pay gaps represent the differences in pay experienced by those in paid employment. To the extent that labour market disadvantage or other factors keep people out of paid employment altogether or constrain them within self-employment or part-time work, the pay gaps represent the situation of very different proportions of the groups in question.

1.2 Scope of the report

The discussion of ethnic pay gaps for men and women focuses on the gaps for those in full-time employment and of working age (16-64/59), as is conventional practice. Chapter 2 of the report identifies the gaps for men and women from the different ethnic groups relative to the pay of White men in full-time work. This description of the pay gaps is followed by a discussion of the contributing factors that have been raised and investigated in the literature.

Chapter 3 covers the gaps in full-time earnings for a subset of adults aged 25-54. This second, narrower, age band avoids including the majority of early retirers or

those on their way out of the labour market for whom earnings may anyway be declining. It also excludes those who may still be studying or in the early stages of employment, with jobs not reflecting their ultimate occupational and pay position. It is potentially of particular interest to consider this narrower age band when looking at ethnic differentials in pay, given that age of leaving full-time education varies substantially with ethnic group, and, similarly, there is variation in the propensity to leave the labour market early.

Following the discussion of pay gaps across the 25-54 age range, chapter 3 explicitly considers variation in pay gaps across those of working age (16-64/59) by broad educational level. The pay gaps as they affect those with higher or lower qualifications are illustrated and discussed.

There follows, in chapter 4, a discussion of the overall distribution of hourly full-time earnings across the different ethnic-gender groups. There is a discussion of what these can tell us compared to a simple focus on the mean.

The remainder of the chapter considers different pay gap measures: first those based on part-time pay compared to the reference category of full-time pay, and second those based on weekly rather than hourly earnings, which take account of the number of hours worked as well as the rate of hourly pay.

For all the different pay gap calculations, tables are presented giving the weighted average pay (hourly pay except for the final table), the pay gap, and the confidence intervals for that gap, for men and women separately. The average used is the mean, rather than the median, though the implications of this choice are discussed in chapter 4. In each case, the tables are followed by illustrative figures showing the gaps and their 95 per cent confidence intervals, ranked by sex and within sex by ethnic group. Confidence intervals provide a way of relating the estimates from the surveyed sample to the ‘true’ values across the whole population. The range represented by the 95 per cent confidence intervals allows us to give boundaries to our estimates within which we can be 95 per cent confident that the true value falls. Where confidence intervals for estimates for different groups overlap we cannot be confident that the population values for those groups are actually different.

2. THE PAY GAP IN FULL-TIME HOURLY EARNINGS BY ETHNIC GROUP AND SEX

2.1 Full-time hourly pay gap for the working age population

First we observe the pay gaps across the whole of the working age population (16-64/59). Tables 2.1 and 2.2 show the average earnings for men and women respectively, along with the percentage pay gap and the 95 per cent confidence intervals for that gap. Figure 2.1 illustrates the pay gaps graphically and shows the confidence intervals for the pay gap estimates. The strong vertical line shows the no pay gap scenario: if all the other points fell onto or close to that line then there would be no pay disadvantage. Points to the left of this line constitute a pay 'advantage', rather than a gap. As we can see, such an advantage applies to Indian men relative to White British men, with a pay advantage of 7.5 per cent. The confidence limits around this negative gap do not reach the zero line, so we can be confident that the pay advantage for Indian men is a real one. On the other side of the line are ranged all the other sex and gender combinations, which all suffer a full-time pay gap.

Table 2.1 Hourly earnings in full time work and pay gaps relative to White British men's earnings, by ethnic group: Men

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap (%)	
			Lower limit	Upper limit
White British	11.59	Reference category		
Indian	12.45	-7.5	-12.9	-2.2
Pakistani	9.32	19.5	13.2	25.9
Bangladeshi	7.05	39.1	31.4	46.8
Black Caribbean	10.34	10.7	5.6	15.9
Black African	10.17	12.2	6.9	17.6
All minority groups*	11.07	4.5	1.9	7.1
All ethnic groups	11.57	Reference category for all women		

Source: Quarterly Labour Force Survey, 2001-2005

Notes: *This includes those other minority groups not separately identified in the table.

White women suffer a substantial pay gap of around 16 per cent. This means that their average full-time earnings are around 84 per cent of men's average full-time earnings. Black African women experience a slightly higher gap but on a comparable level, and we can see that for Bangladeshi women, while their estimated gap is somewhat higher at around 23 per cent the confidence intervals around that overlap with those for White women. Thus, it would appear that Bangladeshi women suffer a

larger pay gap than White women relative to White men, but we cannot be certain that that is the case. On the other hand, both Caribbean and Indian women have lower pay gaps than those experienced by White women (and the confidence intervals do not overlap) though they still earn on average substantially less than White men: their full-time earnings are around 91 per cent and 89 per cent of White men's. Pakistani women suffer the largest pay gap relative to White men. Their average earnings in full time pay are an estimated 28 per cent lower than White men's. This gap is more than double that experienced by Caribbean and Indian women and substantially larger than that experienced by White women, leaving them with average full-time hourly earnings of only £8.31 at 2005 values. The average hourly pay gap for minority women (13 per cent) is almost three times as high as the average hourly pay gap for minority men (5 per cent).

Table 2.2 Hourly earnings in full time work and pay gaps relative to White British men's earnings, by ethnic group: Women

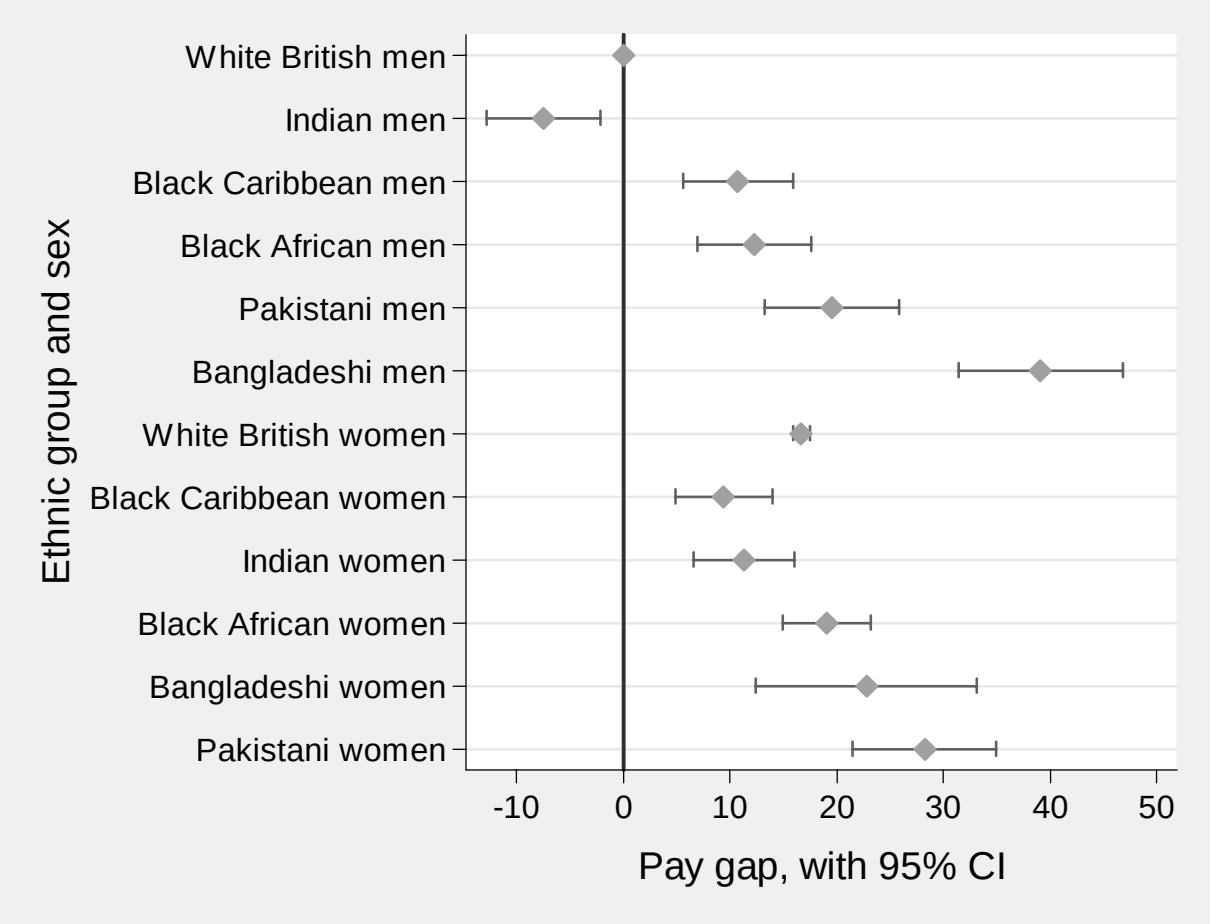
Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap (%)	
			Lower limit	Upper limit
White British	9.65	16.7	15.9	17.4
Indian	10.28	11.3	6.5	16.1
Pakistani	8.31	28.2	21.5	35.0
Bangladeshi	8.94	22.8	12.4	33.1
Black Caribbean	10.50	9.4	4.9	13.9
Black African	9.38	19.0	14.9	23.2
All minority groups*	10.07	13.1	10.9	15.3
All ethnic groups**	9.73	15.9	15.2	16.6

Source: Quarterly Labour Force Survey, 2001-2005, weighted data

Notes: * This includes those other minority groups not separately identified in the table.

** gap is all women compared to all men

Figure 2.1 Pay gaps in full-time hourly earnings for the working age population (16-64/59), by ethnic group for men and women



Source: Quarterly Labour Force Survey, 2001-2005, weighted data

Overall, the pay gaps for women from all groups are substantial. But, if we turn to examine the pay gaps for men from minority groups we see that the ways that gender and ethnicity intersect are complex; and for pay, at least, we cannot simply conceive of ethnic disadvantages compounded by gender, or vice versa. Figure 2.1 shows that the rankings for the different groups in terms of their pay gaps differ between men and women. As noted above, the only group not to suffer a pay gap is Indian men, who in fact experience higher average rates of pay than their White British counterparts. All other men, however, suffer pay gaps relative to White men that are substantial and show their average hourly earnings to be significantly lower than White men's. Black Caribbean and Black African men experience comparable gaps of around 11 and 12 per cent respectively. Pakistani men's pay gaps are substantially higher at around 20 per cent, but the confidence intervals overlap with those for Black Caribbean and Black African men, so the actual gap for all three groups may be of a similar magnitude. Bangladeshi men, however, experience substantially higher gaps than any of the other groups, at nearly 40 per cent, leaving

them with average hourly earnings of only a little over £7. This gap is clearly of a different order to that for any other group.

For Black Caribbeans, pay gaps of a similar magnitude for men and women relative to White British men mean there is little within group difference by sex. By contrast, the Indian and Caribbean women's pay gap is of a similar size. There is a large gender gap between Indian men and women, resulting from Indian men's above average earnings. White women experience a relatively large gender pay gap compared to White men. Black African women experience a pay gap comparable to that for Pakistani men, but both Black African and Pakistani women are disadvantaged relative to the men from their groups. On the other hand, though Bangladeshi men and women both experience substantial pay gaps, Bangladeshi men's gap is much larger than that for Bangladeshi women – and the confidence intervals only just overlap. Patterns of apparent advantage and disadvantage thus shift with the point of comparison. The factors that create a gender pay gap are clearly not consistent across groups; nor would ethnic differences in pay appear to be explicable by a common set of relevant factors. Nevertheless, some of the absolute differences in earnings are startling. How, then, can we understand these pay gaps? That is the issue that is covered next.

2.2 Explaining the pay gap

What then are the reasons for these substantial differences in pay rates between groups and by sex? As discussed above the three interrelated factors of discrimination, occupational segregation and concentration, and caring responsibilities – or by extension – continuous or interrupted work histories and constraints on the type of job taken are all of relevance to ethnic as well as sex differences in hourly pay.

The role of qualifications is also clearly fundamental in considering levels of pay – as well as of participation in work itself. Qualifications vary substantially across different ethnic-gender groups, an issue that is explored further in section 2.2.5. Moreover, rates of economic activity, and the extent to which those in paid employment are a small or large proportion of the group is relevant, considering the great differences by ethnic group in this area. For minority groups who have immigrated more recently, whether the work experience and qualifications were obtained in the UK or overseas may play a part in obtaining differential rewards in pay; and networks and familiarity with host institutions may also influence which jobs people go into, and thus their pay. Related to this, there may be preferences for particular jobs or sectors, which may be lower paying ones. Differences in region of residence and thus regional variations in pay may impact on minority ethnic groups as well and constrain whether jobs are available and the types of jobs.

Obviously these factors are highly interrelated. Discrimination in employment may affect pay directly but may also affect what sectors individuals are employed in. As has been argued in relation to sex segregation, highly 'feminised' occupations are likely to command lower pay, and this may be true in relation to ethnic occupational concentration as well. The opportunity to build uninterrupted work histories will vary with occupation and industry and those more vulnerable to unemployment and interruptions in their working lives will be those with lower qualifications. Region of residence will interact with labour market vulnerability to constrain opportunities; and location relative to job opportunities may also be an issue for pay, with costs of transport varying across groups. This, in turn, will affect the extent to which the rewards of 'better' jobs are proportionate to the extra expense involved in reaching them. Disentangling precisely the individual contribution of all the different factors is neither the purpose nor within the scope of this report. It remains important to consider in the following discussion the linkages between different parts of the pay gap 'story'.

The potential role in the different ethnic and gender pay gaps of: occupational segregation; caring and continuous/interrupted work histories; educational qualifications; and the role of discrimination are considered in turn, in relation to the pay gap results.

2.2.1 Ethnic occupational segregation

In relation to occupational segregation, ethnic minority groups are highly concentrated by employment sector, though sex segregation declined slightly across all groups between 1991 and 2001 (Blackwell and Guinea-Martin, 2005). Among women, White women were, in 2001, most heavily concentrated in sales assistant work, in clerical and secretarial work and as care assistants and carers (Blackwell and Guinea-Martin, 2005). Pakistani and Bangladeshi women showed a heavy concentration in sales work, with more than one in ten of both of these groups of women being in such jobs. Clerical jobs and educational assistants were also a focus of employment for both of these groups. Black Caribbean and Black African women were concentrated in nursing and care work – with large proportions employed directly by the National Health Service. Indian women's concentration in textile industries has declined with the decline of that sector and they are now most likely to be found in clerical positions and as sales assistants and related.

One in 20 Indian men are doctors, though they are also heavily concentrated in shopkeeping and retail, and also as sales assistants and software professionals (Blackwell and Guinea-Martin, 2005; see also Sly et al., 1998). By contrast, over half of Bangladeshi men work in the catering and restaurant sectors, which traditionally command low wages. Pakistani men are heavily concentrated in transport and taxi-

driving, with over one in ten Pakistani men being a taxi driver in 2001. Caribbean men have traditionally been more concentrated in construction industries than the other minority groups. In 2001, they were most likely to be sales assistants, security guards, postal workers, van drivers and in storage occupations. Black African men were also concentrated as security guards and sales assistants but were also relatively likely to be software professionals, cleaners and medical practitioners.

Pay and conditions – and chances of continuous employment – vary across occupations, with those with lower pay also often being the most at risk of unemployment and thus interruptions to working, discussed below. Pay gaps stem in large part from these concentrations in particular sectors, which themselves are related to regional distributions of groups and employment opportunities, to characteristics and qualifications of individuals, and to practices of chain migration into particular industries among migrants, as well as to discriminatory practices which constrain opportunities or channel different sexes and ethnicities into different opportunities (Carmichael and Woods, 2000). For women, in addition, different types of occupation may be preferred for the opportunities they present to combine work and family responsibilities and to the extent that they are compatible with group gender roles and expectations.

As well as the occupation itself, the sector in which it is carried out can be important for pay and for how protected the employment is. Table 2.3 shows the variation in public sector employment both by gender and ethnicity, with women much more likely to have public sector jobs. There is also variation among women according to their ethnic group, with Black Caribbean women being the most likely to hold such jobs, over 10 percentage points higher than white British women. Among men Black Caribbean and Black African men were most likely to be employed in the public sector, with much lower rates among Pakistani and Bangladeshi men. Given that it is the hourly pay gaps among those in full-time work that are the issue under consideration, Table 2.3 also shows the percentages in public sector employment, restricted to those in full-time work. For all groups, except white British men, those in full-time employment show higher proportions in the public sector, with the proportion of full-time employed Black Caribbean women in the public sector approaching 50 per cent, over three times the rate for white British men and nearly twice the rate for Black Caribbean men. This may contribute to the rather lower pay gaps experienced by Caribbean women compared with women from other groups. Two-fifths of Pakistani and Bangladeshi women in full-time work also work in the public sector, nearly four times the rate of men from the same groups. However, women from these two groups experience substantially higher pay gaps than Black Caribbean women. So while sector may be a contributory factor in pay gaps, it still leaves much to be explained.

Table 2.3 Per cent employed in the public sector, by ethnic group and sex

Ethnic group	Men		Women	
	All	Full-time employment only	All	Full-time employment only
White British	15.9	15.9	34.0	34.2
Indian	15.9	16.2	29.9	31.3
Pakistani	9.5	10.5	37.2	41.0
Bangladeshi	9.7	11.4	36.4	40.0
Black Caribbean	20.8	21.2	45.6	48.8
Black African	21.3	23.2	33.9	38.3
All*	16.1	16.1	34.0	34.5

Source: Labour Force Survey, 2002-2005, weighted proportions
Notes: *This includes other ethnic groups not considered separately

2.2.2 Self employment and homeworking

Self-employment is known to be a precarious option, with high risks of failure among those establishing small businesses. As well as covering more obvious entrepreneurial activities, such as small businesses, it also covers a number of occupations, such as hair-dressing and taxi-driving, which are known for their relatively low rates of pay and long hours. Reliable information on rates of pay among the self-employed is hard to come by – they are typically excluded from earnings analysis because of perceived unreliability of the information. What is clear, though, is that while self-employment may be a option of choice for some, it is often a route of last resort. We can think, here, for example of those who turned to self-employment following the wide-scale redundancies of the 1980s. For minority groups there is evidence that self-employment may be a response to lack of opportunities in employment and thus may represent a 'constraint' more than a choice (Clark and Drinkwater, 1998, 2000).

Self-employment and niche occupations may also be rendered more attractive by contrast with racist attitudes or the behaviour of co-workers in more 'mainstream' employment, or anxiety about such antagonistic job 'cultures'. Furthermore, self-employment is not necessarily immune from the structural inequalities of formal employment opportunities. Thus, self-employed women tend to earn less than self-employed men. The extent to which comparable forms of self-employment receive lower rewards among those from different ethnic groups deserves further attention. Meanwhile, it is worth highlighting the extent to which self-employment rates vary, with high rates among Indian and Pakistani men and low rates among Black Caribbean men, with White men in between. These rates are suggestive of both employment constraints and opportunities and may indicate the experience of

discrimination among those from minority ethnic groups. They may themselves indicate further pay inequities than are found from an examination of earnings alone.
A related area, in which knowledge is limited, but which can offer the flexibility at the same time as long hours and poor rewards, and which may form a response to limited labour market opportunities, is home working. This can also take place outside the formal economy and thus become a hidden form of low pay and exploitation. Reliable information on rates of home-working and rates of pay is hard to come by but it seems that home working tends to be carried out by women and there is some evidence that it is more common among women from minority ethnic groups, while rates of pay are poorer among women than among men and are lower for women from minority ethnic groups than for majority group women (Felstead and Jewson, 1996).

2.2.3 Geography

Concentration in particular geographical areas can influence unemployment chances and labour market opportunities more generally. People can only take up the jobs that are available and will be affected by average pay rates in such areas. However, as Table 2.4 shows, minority groups overall are heavily concentrated in London, where average pay is higher than in most of the rest of the country, though unemployment is also high.

Table 2.4 Concentration (%) of minority groups in London, by sex

Ethnic group	Men	Women	All
White British	9.1	8.5	8.8
Indian	45.4	44.8	45.1
Pakistani	22.2	20.7	21.4
Bangladeshi	64.0	62.6	63.3
Black Caribbean	56.5	62.1	59.4
Black African	68.2	71.9	70.2
All	13.1	13.2	13.2

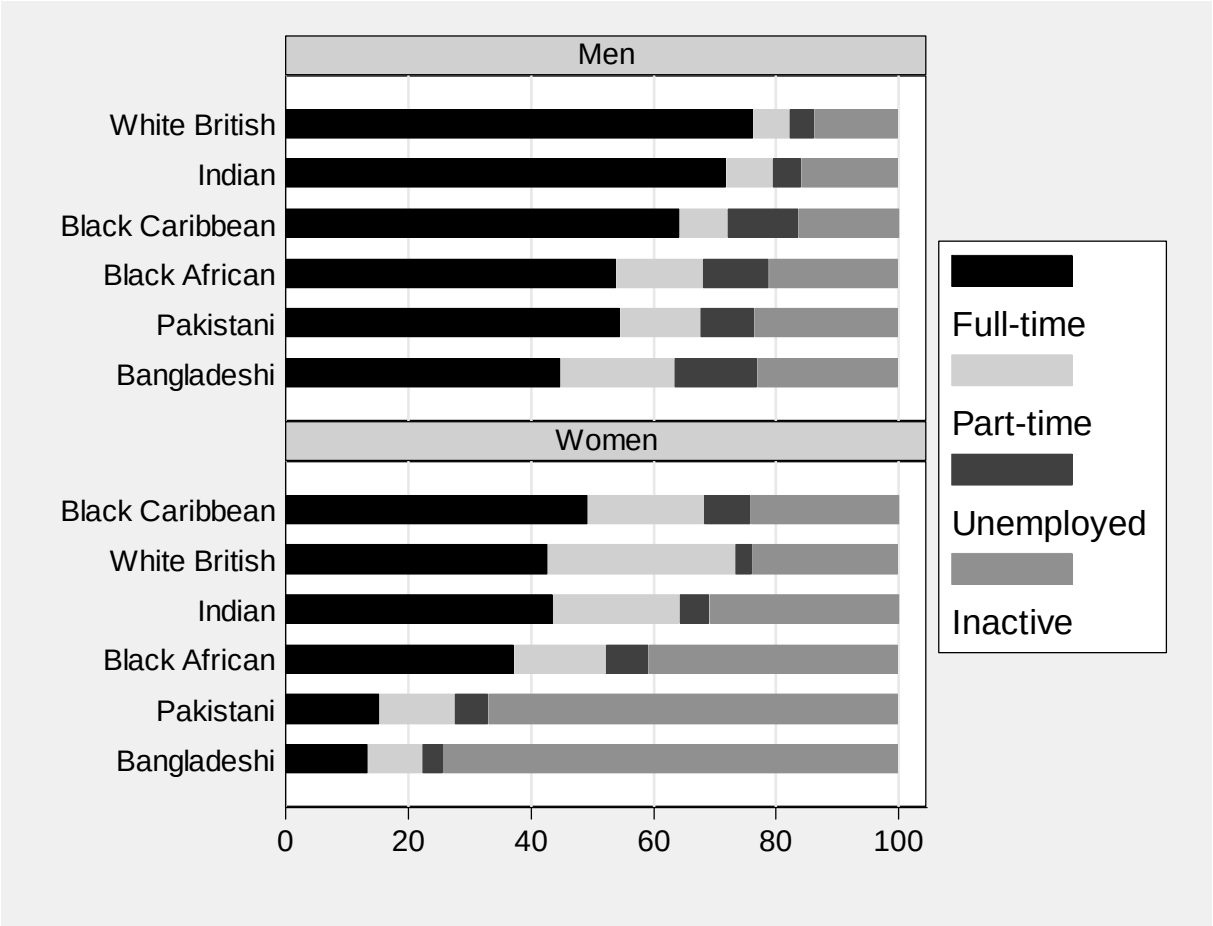
Source: Labour Force Survey, 2002-2005, weighted proportions
Notes: As for Table 2.3

2.2.4 Economic activity

A substantial part of the pay gap for women can be attributed to the fact that their caring responsibilities, in particular for young children, but also for older people, limit their participation in full-time work. Those who consider themselves unavailable for full-time work, which for women is predominantly as a result of family commitments, though may also be as a result of health problems or through studying, are deemed ‘economically inactive’. Those who are ‘economically active’ may be in full-time work, part-time work or unemployed. Both rates and forms of economic activity vary substantially across women from different ethnic groups. They also vary, though to a

lesser extent, among men from different ethnic groups, as we can see in Figure 2.2. The consequences of this variation in terms of pay rates can be complex.

Figure 2.2 Rates of full-time and part-time employment, unemployment and economic inactivity, by ethnic group for men and women



Source: Labour Force Survey, 2002-2005, weighted proportions

Figure 2.2 shows that among women, rates of full time work are largest among Black Caribbeans, but that White British women have slightly higher proportions in work overall, given that 30 per cent are in part-time employment. Indian women have very similar rates of full-time employment to White British women but lower rates of part-time employment. Among Black African women, only three-fifths are economically active, but this drops to around a third of Pakistani women and a quarter of Bangladeshi women. There are also differences in unemployment rates among women and men. White British men of working age have the highest rates of full-time work and of economic activity of all men. Rates of part-time work are low at around 6 per cent, and they are only slightly higher for Indian and Black Caribbean men; but they are double that for Pakistani and Black African men and treble that for Bangladeshi men.

For women, we can consider that the pay gap is bound up with how the attempt to manage the demands of both employment and family life is solved. White British women on average both interrupt work for a period on the birth of children and are quite likely to return to part-time work. These may be practical solutions from the point of view of combining work and family life, but are also likely to lead to pay deficits. Black Caribbean women are more likely to continue working alongside having children. Again, this may be a practical solution economically, but may bring other costs which are not captured by comparisons of pay, such as more 'time poverty'. By contrast, Bangladeshi and Pakistani women are much more likely to leave the labour market, not only on having children, but even prior to that on marriage itself (Dale et al., 2002; Lindley et al., 2006). They may thus fulfil their expectations of motherhood, and while they are out of the labour market they cannot, by definition, experience a pay gap. However, long periods away from paid employment may leave them in a vulnerable position in terms of pay prospects should they decide or need to return to work in the future.

Such different ways of dealing with the demands of paid employment and family responsibilities will also be inseparable from their overall family situation. The earning capacities of partners will influence what is plausible or makes sense. For those women with children and with high-earning partners, part-time work may seem the most obvious and attractive option, despite its relatively poor rewards. For those with low-earning partners, their potential contribution from poorly paid part-time work may not make a sufficient contribution to household income to render it a 'sensible' choice. While for those without a partner at all, the difference between working and not working will be that much starker. To the extent that partnership and partner's earning capacities vary by ethnic groups, different patterns of managing the caring and employment roles are likely to follow, an issue that has been explored in consideration of workless versus work-rich families.

Both time out of the labour market and time spent in part-time employment bring deficits in pay relative to being continuously employed (Manning and Petrongolo, 2005; Olsen and Walby, 2005). White women are more likely to be in part-time employment than women from any of the minority groups; and the long-term impact of this on earnings, even if they subsequently return to full-time work may help to explain the substantial full-time pay gap they experience, as illustrated in Figure 2.2, Caribbean women are much less likely to take up part-time employment and are much less likely to experience interruptions to their working lives associated with having a family. They manage to combine work and bringing up children to a remarkable extent. This means that they do not suffer the deficits associated with interruptions to working life to the same extent, which could go some way to explaining the fact that their pay gap is lower than that for White British women. It

might be possible to argue that they would experience an even lower pay deficit were they not at risk of discrimination both in relation to sex and ethnicity.

Marriage and caring responsibilities remove women completely from the labour market to different extents. Pakistani and Bangladeshi women are more likely to be economically inactive following marriage than those from other groups, even without the presence of children (Dale et al., 2002). By contrast, unmarried and highly qualified young women have very similar economic activity rates regardless of ethnic group (Lindley et al., 2006). Differences in economic activity rates may have implications for observed pay, in that among those groups with low economic activity rates, those women in paid work will be a very specific group. Thus they are likely to be the best placed to compete in the labour market in terms of qualifications, skills and opportunities, as well as being unlikely to have any caring responsibilities. They are what we would call a 'selected sample' in terms of labour market participation. Thus, we would expect the pay gaps of such women to be lower than those for women where the majority are in employment and they are trying to combine work with family responsibilities. In fact, those women with the highest economic inactivity rates, Pakistani and Bangladeshi women, also have large pay gaps. But we might anticipate that the gaps would be even larger if more women from these groups participated in the labour market. And this may also help to explain why the pay gaps for men from these groups are close to or, in the case of Bangladeshi men, higher than those for women from these groups.

As well as taking time out of the labour market for caring responsibilities, interruptions to employment are also caused by periods of unemployment. While White women have lower unemployment rates than men, both men and women from minority ethnic groups experience higher unemployment rates than the White British, as Figure 2.2 showed. And, what information we have on durations suggests that unemployed men from minority groups will experience longer durations of unemployment than those from the majority group (Frijters et al., 2005; Thomas, 1998), with a consequent longer, and therefore more damaging, interruption in relation to pay.

2.2.5 Qualifications

Qualifications are also closely related to the type and level of employment gained; and patterns of qualifications are distinctive. There is a substantial association between qualifications levels and average pay levels, overall. And there is a strong policy emphasis on education as the route to greater opportunities and more equal outcomes. Table 2.5 shows in columns 1 and 3 what proportions of the different groups have qualifications at level 3 and above – within the population as a whole. There tend to be smaller proportions of women qualified at this level in the current

population. The picture, though, is a dynamic one. There are more lacking qualifications from the Pakistani and Bangladeshi ethnic groups, but there are also growing numbers of graduates, both men and women from these groups. Black Africans are strongly represented among the highly qualified; but 'Black African' is a very diverse group. Caribbean women are typically more highly qualified than Caribbean men –and this fact may go some way to explain the fact that men and women from this group experience very similar hourly pay gaps. The low rates of those more highly qualified among Bangladeshi and Pakistani men and especially women might appear to go some way to explaining their pay gaps. But it will also affect their probability of being in work at all. Thus the second and fourth columns of Table 2.5 restrict the consideration of the proportions qualified to level 3 and above to those in full-time work.

For men, the proportions with higher level qualifications increase among those in full-time work, showing how those who are more qualified are more likely to be in this situation, rather than being unemployed, inactive or in part-time work. Nevertheless, strong differences between the groups remain, which may go some way to explaining the pay gaps for the less well qualified groups, though not for Black African men who have the highest proportions in full-time work qualified at this level. For women, though the difference is much more striking: over 50 per cent of all the groups considered who are in full-time work are qualified to this level, and the differences between groups are not substantial: indeed Pakistani and Bangladeshi women, along with Black African women, in full-time time work are most likely to be qualified to this level. Column four thus shows how those women with lower qualifications are more likely to opt for – or be restricted to – economic inactivity, part-time work or unemployment. On the strength of qualifications then, we might expect small full-time pay gaps between men and women, or even for women to be more highly paid, and for the differences in gaps between women to be small. In fact we saw very different results in Table 2.2.

It may be that there are different levels of pay disadvantage at different levels of qualifications, which affect the overall levels of pay gaps observed. In section 3, therefore, we consider this issue explicitly by examining the pay gaps experienced by women from different ethnic groups and minority group men with the same broad level of qualifications.

Table 2.5 Percentage qualified at level 3 and above among the working age population, by ethnic group for men and women

Ethnic Group	Men		Women	
	All	In full-time employment only	All	In full-time employment only
White British	44.2	46.5	39.6	50.9
Indian	48.0	50.3	41.8	54.6
Pakistani	32.5	37.5	24.6	56.4
Bangladeshi	21.8	25.3	17.1	56.1
Black Caribbean	31.9	36.0	42.2	51.9
Black African	48.0	54.5	38.7	56.6
All	43.2	45.9	39.2	50.8

Source: Labour Force Survey, 2002-2005, weighted proportions
Notes: As for Table 2.3

Across the board younger women have been outperforming younger men in school and in post-compulsory education for some time now. However, the current distribution in pay is influenced by the qualifications of those currently of working age, and the patterns of achievement among those leaving school in recent years will take a while to dominate the working age population. Meanwhile, though younger people are more likely to have qualifications than older people, younger people at the beginning of their careers are less likely to be in stable and well-paid employment. Thus the different age structures of the different ethnic groups, with the Black Africans and the Pakistanis and Bangladeshis having a younger age profile than the population as a whole, complicates the account yet further.

2.2.6 Born outside the UK

Research has shown that overseas qualifications, like overseas experience, command less leverage in the labour market than UK qualifications. And various aspects of immigrant experience and migration history, from the treatment of work experience obtained in another country to the role of language fluency where English is not the first language, have been shown to have potential impacts on labour market experience. Thus, there is likely to be a negative impact on pay even for qualified migrants relative to White British-born. Table 2.6 shows the proportions of the different groups who were not born in the UK: these are substantial for all minority groups, though highest for Bangladeshi and Black African men and women. However, if we turn to those in full-time employment only, we see that, even though for most groups there is little variation in the proportions born abroad, the proportions of Pakistani and Bangladeshi women born abroad reduce dramatically. Thus

Pakistani women in full-time employment are no more likely to be born abroad than their Black Caribbean counterparts. However, this means that Pakistani and Bangladeshi women in full-time employment will tend to be younger, indicating greater chances of higher qualifications on the one hand, but shorter employment histories on the other.

Table 2.6 Per cent born outside the UK, by ethnic group for men and women

Ethnic group	Men		Women	
	All	In full-time employment only	All	In full-time employment only
White British	2.4	2.3	2.5	2.7
Indian	66.0	68.2	66.6	63.6
Pakistani	65.4	67.8	61.8	39.6
Bangladeshi	83.4	85.4	80.1	48.5
Black Caribbean	39.1	39.2	37.8	39.0
Black African	84.1	84.6	85.0	82.5

Source: Labour Force Survey, 2002-2005, weighted proportions

2.2.7 Discrimination

Direct discrimination in employment has always been considered to be an important element of the gender pay gap. As we saw above, women from all groups experience a pay gap relative to White men. Even though there was some variation across the groups, all estimated pay gaps for women were in excess of 9 per cent. However, ascertaining the precise contribution of employer discrimination – and disentangling it from, on the one hand genuine preferences in relation to employment and on the other from the potential indirect effects is problematic.

The existence of pay discrimination, whether intentional or unintentional, is indicated by tribunals, complaints to the CRE, EOC and TUC, as well as surveys of people's perceptions. Patterns of progression, rates of promotion and their association with rates of pay have been studied in several of the professions and within individual organisations. The findings from these studies have tended to suggest that discrimination is a factor in holding back otherwise qualified candidates, with consequent effects on pay. Whether such discrimination is institutional and endemic, whether it stems from the conscious actions of prejudiced individuals, or whether it is unintended and accidental is a subject of on-going debate.

Discrimination in pay has also been argued from the fact of unexplained differences between groups in statistical analyses when all apparently relevant characteristics have been taken account of. In other words, when factors such as age, educational qualifications and experience in the job have been stripped out, the difference that remains is held to be due to discrimination on grounds of sex (e.g. Olsen and Walby, 2005) or ethnicity (e.g. Blackaby et al., 1998), or both. Whether the gap that remains can truly be said to constitute discrimination is contested, but it seems uncontentious to argue that at least a part of it is likely to be (Heath and McMahon, 1997; see also Heath and Cheung, 2006). The true scale and impact of pay discrimination remains hard to determine, but what is important is to find ways of overcoming unjustifiable differences in pay.

Employment discrimination can also have indirect effects on pay in influencing the types of jobs – and their associated pay – that individuals enter. Discrimination at the point of employment (or rejection) is even harder to determine than discrimination in pay. However, a small number of studies submitting otherwise equal applications have demonstrated discrimination against those from minority ethnic groups in selection for interview. Such studies provide the most direct evidence of employer discrimination at the point of job entry. Failure to gain employment can influence pay, by forcing applicants to default to ‘less desirable’ jobs, including those without such formal appointments procedures. It may also make self-employment with its less reliable and lower pay more likely, as well as employment in ethnically specific niche occupations, such as Chinese or Balti restaurants. This relates to the earlier discussion of occupational segregation, and is an issue facing new migrants as well as they are channelled or locate themselves within specific industries and occupations.

Obviously, all the factors contributing to minority ethnic group pay gaps are inter-related. And some might argue that any gap in pay is evidence of discriminatory structures and practices in society that, for example, determine the sorts of areas minorities live in (and thus the labour markets they have access to) and the sorts of jobs they occupy (and thus the related pay structure), and their experience of education (and thus the skills and qualifications they have to enable them to compete for higher paying jobs). Such an argument is valuable in drawing attention to the inter-relatedness of factors that lead to lower pay, though it is less helpful in directing our attention towards policy solutions, as it makes it difficult to specify particular interventions that might be effective.

On the other hand, focusing solely on individual characteristics and choices in analysing pay differences, or attempting to explain employment and pay discrepancies in terms of characteristics associated with immigration (language, lack

of local ‘know-how’ etc.) risks ignoring the way individuals interact with structures, and that apparent employment decisions, such as for self-employment, may not be choices so much as constraints on opportunities.

3. PAY GAPS FOR THOSE AGED 25-54 AND THE ROLE OF QUALIFICATIONS

3.1 Full-time hourly pay gap for 25-54 year olds

As noted above, it can be useful to restrict consideration to those who are above typical student ages and below the period at which engagement in the labour market starts to drop off in the later 50s. The average earnings and percentage gaps for those aged 25-54 are shown in Tables 3.1 and 3.2 and graphically illustrated in Figure 3.1.

Table 3.1 Hourly earnings in full-time work and pay gaps relative to White British men's earnings, those aged 25-54, by ethnic group: Men

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	12.48	Reference category		
Indian	12.78	-2.4	-7.8	3.0
Pakistani	10.17	18.5	11.1	25.9
Bangladeshi	6.91	44.6	36.4	52.8
Black Caribbean	10.95	12.2	6.5	17.9
Black African	10.64	14.7	9.0	20.4
All minority groups	11.62	6.9	4.2	9.6
All ethnic groups	12.44	Reference for all women		

Source: Quarterly Labour Force Survey, 2001-2005, weighted data
Notes: as for Table 2.1

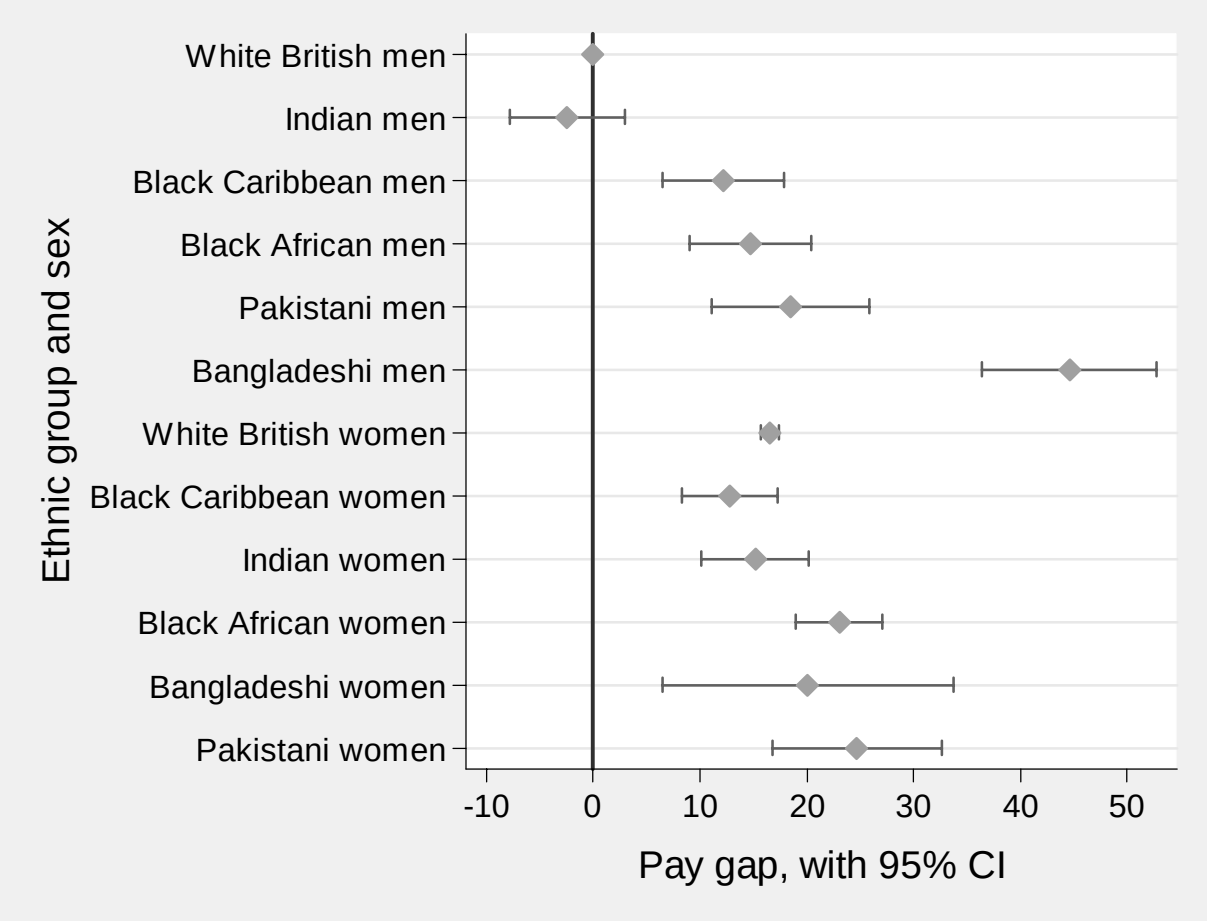
Table 3.2 Hourly earnings in full-time work and pay gaps relative to white British men's earnings, those aged 25-54, by ethnic group: Women

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	10.41	16.6	15.7	17.4
Indian	10.58	15.2	10.1	20.2
Pakistani	9.40	24.7	16.7	32.6
Bangladeshi	9.97	20.1	6.5	33.7
Black Caribbean	10.88	12.8	8.3	17.3
Black African	9.60	23.0	19.0	27.1
All minority groups	10.57	15.3	13.0	17.6
All ethnic groups	10.48	15.7	15.0	16.5

Source: Quarterly Labour Force Survey, 2001-2005, weighted data
Notes: as for Table 2.2

Figure 3.1, showing the full-time pay gaps for this age range, is very similar to Figure 2.1, both in the overall pattern and the estimates of the gaps. In some cases the confidence intervals have increased following the reduction in sample size; and the Indian men's advantage in pay relative to white British men is no longer so clear cut, though their advantage relative to all other groups of men and women is still very evident. Otherwise, similar conclusions to those drawn above in relation to Figure 2.1 apply.

Figure 3.1 Pay gaps in full-time hourly earnings, those aged 25-54, by ethnic group for men and women



Source: Quarterly Labour Force Survey, 2001-2005, author's analysis
Notes: The reference category of white full-time men is also restricted to those aged 25-54 only.

3.2 The role of qualifications

An underlying assumption of education and certification is that an increase in skills leads to better jobs and thus to better pay. The aspiration for Britain to be a 'meritocracy', where outcomes (of which pay is perhaps the most obvious) should be dependent on skills and effort, is criticised by some as being flawed for a number of reasons. These include the fact that there is no objective measure of skill, and talent and rewards can be shaped, skills defined, and opportunities for success for the next

generation created by those who are currently the most privileged in society. Nevertheless, it remains an intuitively attractive and widely shared idea that the skills and effort represented by the acquisition of educational qualifications do, or at least should, translate into better earnings. If pay, then, only or largely differed as a result of differences in qualifications, it would imply a policy focus on improving educational attainment – and particular types of educational attainment (as suggested for example by the Women and Work Commission, 2006); and that there were not fundamentally arbitrary processes taking place in the allocation and distribution of pay. This analysis, therefore, looked once again at full-time pay gaps, this time breaking the groups down according to whether respondents had qualifications up to level 2 (equivalent to GCSEs A*-C) or whether they had qualifications above this level.

Tables 3.3 and 3.4 provide the average earnings and full-time pay gaps for those qualified up to level 2 and Tables 8a and 8b illustrate the earnings and gaps for those qualified at level 3 and above. Figure 3.2 illustrates the full time pay gaps for the lower levels of qualifications and Figure 3.3, for the higher levels. In both cases the reference category has been adjusted to be the average for white British men of the relevant qualifications level.

Table 3.3 Hourly earnings in full time work and pay gaps relative to white British men's earnings, those with qualifications up to level 2, by ethnic group: Men

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	8.78	Reference category		
Indian	9.19	-4.7	-11.8	2.5
Pakistani	6.86	21.8	13.9	29.7
Bangladeshi	5.05	42.5	37.3	47.7
Black Caribbean	8.32	5.1	-1.1	11.4
Black African	8.22	6.4	-1.4	14.3
All minority groups	8.29	5.5	2.1	9.0
All ethnic groups	8.87	Reference category for all women		

Source: Quarterly Labour Force Survey, 2001-2005, weighted data
Notes: as for Table 2.1

Table 3.4 Hourly earnings in full time work and pay gaps relative to white British men's earnings, those with qualifications up to level 2, by ethnic group: Women

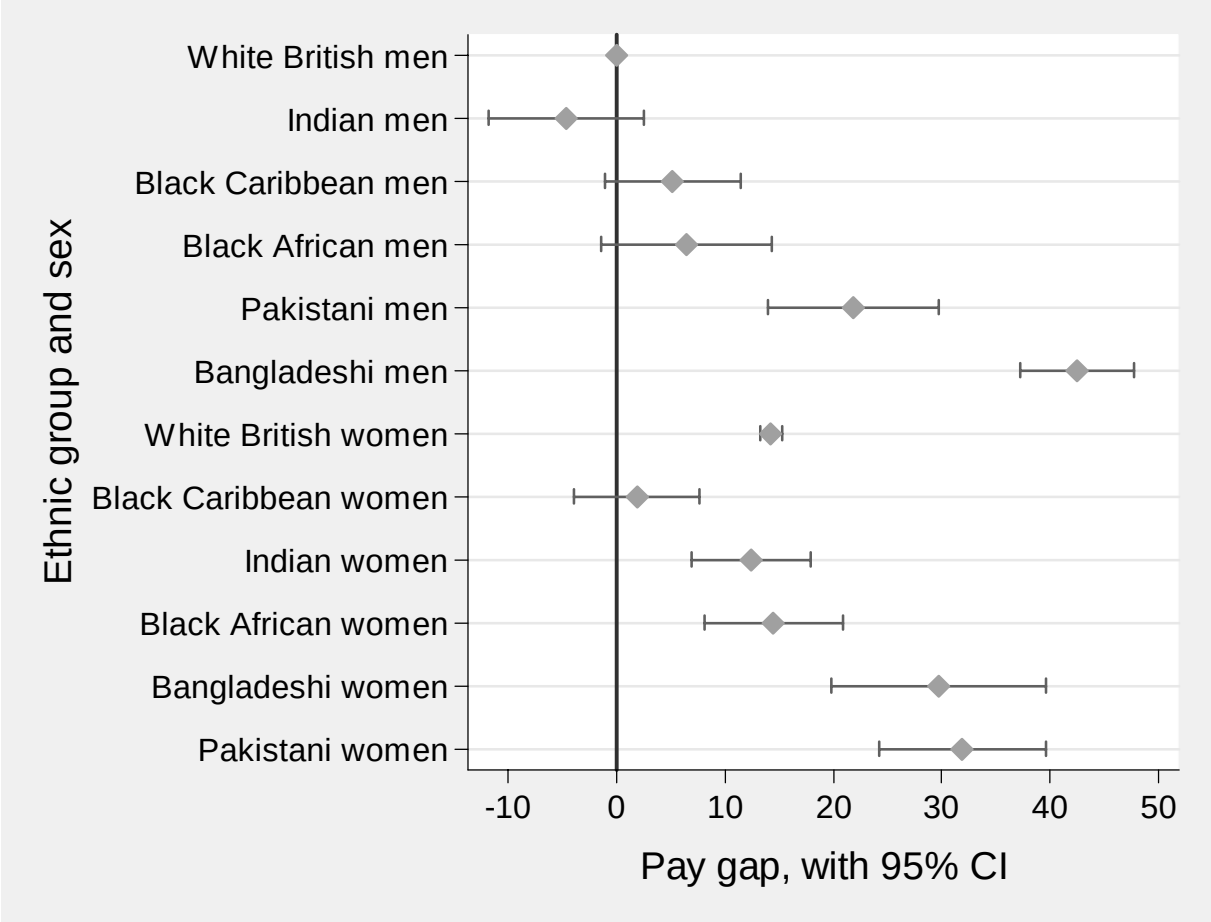
Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	7.52	14.2	13.2	15.3
Indian	7.69	12.4	6.9	17.9
Pakistani	5.98	31.9	24.2	39.6
Bangladeshi	6.17	29.7	19.8	39.6
Black Caribbean	8.62	1.8	-3.9	7.6
Black African	7.51	14.5	8.1	20.9
All minority groups	7.85	10.5	7.6	13.5
All ethnic groups	7.67	13.5	12.5	14.5

Source: Quarterly Labour Force Survey, 2001-2005, weighted data
Notes: as for Table 2.2

Figure 3.2 shows that for those with lower levels of education, pay gaps are reduced for Black Caribbean women, suggesting that less well-qualified Caribbean women are less disadvantaged than Caribbean women overall. The gap for White British Women is slightly reduced – but remains substantial at around 14 per cent. Thus, less qualified White women continue to be substantially disadvantaged relative to less-qualified White British men. For Pakistani and Bangladeshi women, the gap actually increases. This suggests that is among the jobs requiring lower levels of qualifications that Pakistani and Bangladeshi men and women suffer a particular disadvantage, and where they are most vulnerable to low pay.

Among men, it is also worth noting that the relatively strong position of Indian men in terms of pay is discernible at these lower qualifications levels, even though the confidence intervals now overlap with those of the White British men. Their pay advantage would therefore appear to be less conclusive at this level. As with Pakistani and Bangladeshi women the pay gaps for Pakistani and Bangladeshi men actually increase at this lower level of qualifications, suggesting that it is at this level that their pay disadvantage is concentrated, and Figure 3.2 graphically reveals how the pay gaps for Bangladeshi men stand out overall.

Figure 3.2 Pay gaps in full-time hourly earnings, those aged 16-64/59 and qualified up to level 2, by ethnic group for men and women



Source: Quarterly Labour Force Survey, 2001-2005, weighted data

Turning to those with higher levels of qualifications, we can see, from Table 3.6 and Figure 3.3, that the impact on the gap for White British women is once again fairly small, once qualifications level has been taken account of. It still remains at around 15 per cent. Higher qualifications reduce the pay gap relative to White British men across the different groups of women, but still leave substantial gaps for Pakistani, Bangladeshi and Black African women. And given that they also reduce the gap for minority group men the gap between men and women from the same group tends to increase among those with this level of qualifications.

Among men, we see that the Indian advantage is much higher among those with level 3 and above qualifications. This is striking in as much as it suggests that the pay advantage for this group is not simply consequent on high levels of qualifications. However, these broad bands of qualifications contain a lot of diversity not only in precise levels of qualifications, but also in their type and subject or specialist area, which will of course impact on the nature of the jobs undertaken and the remuneration received. Thus, the Indian men may be concentrated at the higher end

of this level 3 and above band, while, conversely, Pakistani and Bangladeshi men and women may be concentrated at the lower end of the level 2 and below band.

Table 3.5 Hourly earnings in full time work and pay gaps relative to White British men's earnings, those qualified at level 3 and above, by ethnic group: Men

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	13.48			
Indian	15.24	-13.1	-20.2	-6.1
Pakistani	12.25	9.1	-0.1	18.4
Bangladeshi	11.69	13.3	-0.7	27.3
Black Caribbean	12.44	7.6	0.3	15.0
Black African	11.45	15.0	8.5	21.6
All minority groups	13.71	-1.7	-5.2	1.8
All ethnic groups	13.46	Reference category for all women		

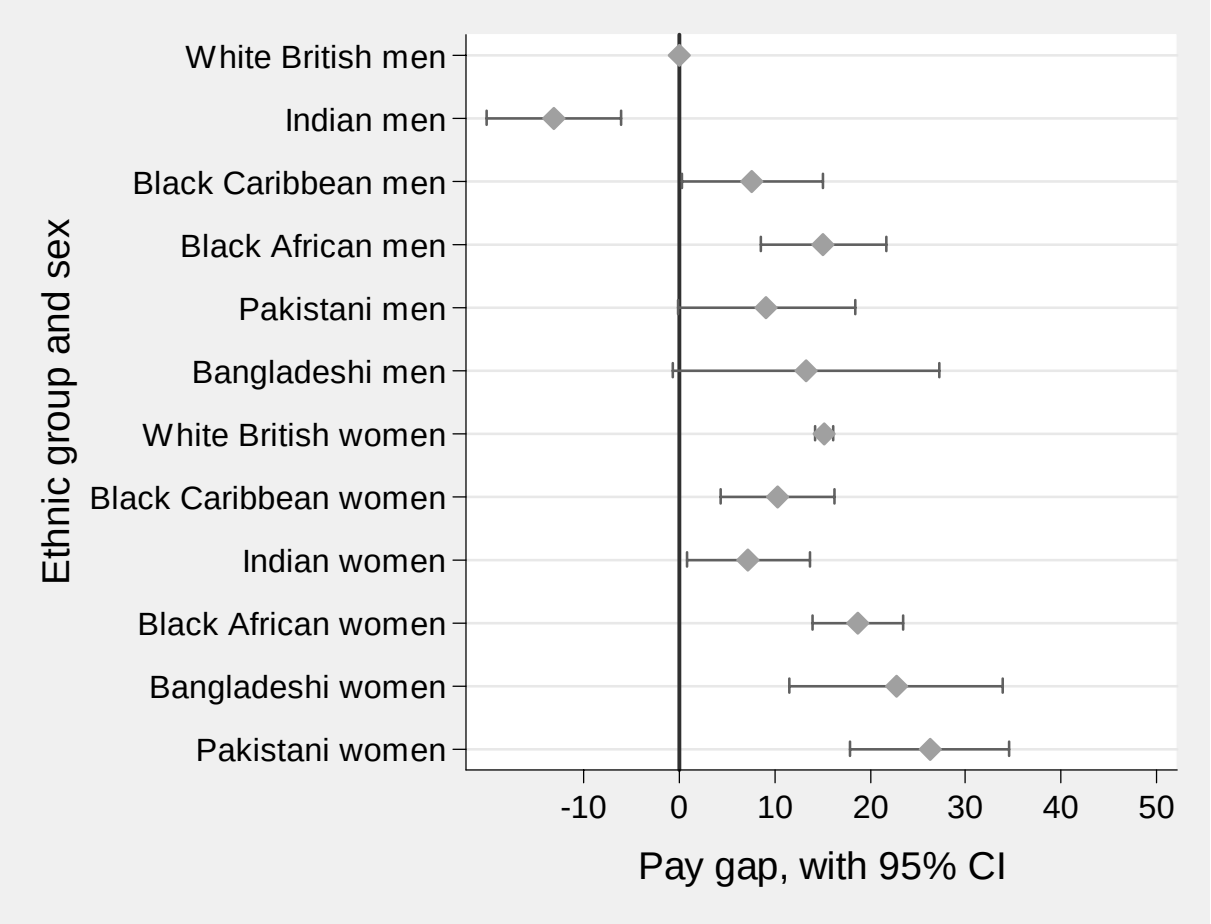
Source: Quarterly Labour Force Survey, 2001-2005, weighted data
Notes: as for Table 2.1

Table 3.6 Hourly earnings in full time work and pay gaps relative to white British men's earnings, those qualified at level 3 and above, by ethnic group: Women

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	11.43	15.2	14.3	16.2
Indian	12.51	7.2	0.8	13.6
Pakistani	9.94	26.2	17.9	34.5
Bangladeshi	10.42	22.7	11.5	33.9
Black Caribbean	12.09	10.3	4.4	16.2
Black African	10.96	18.7	14.0	23.4
All minority groups	11.85	12.1	9.3	14.9
All ethnic groups	11.47	14.8	13.9	15.7

Source: Quarterly Labour Force Survey, 2001-2005, weighted data
Notes: as for Table 2.2

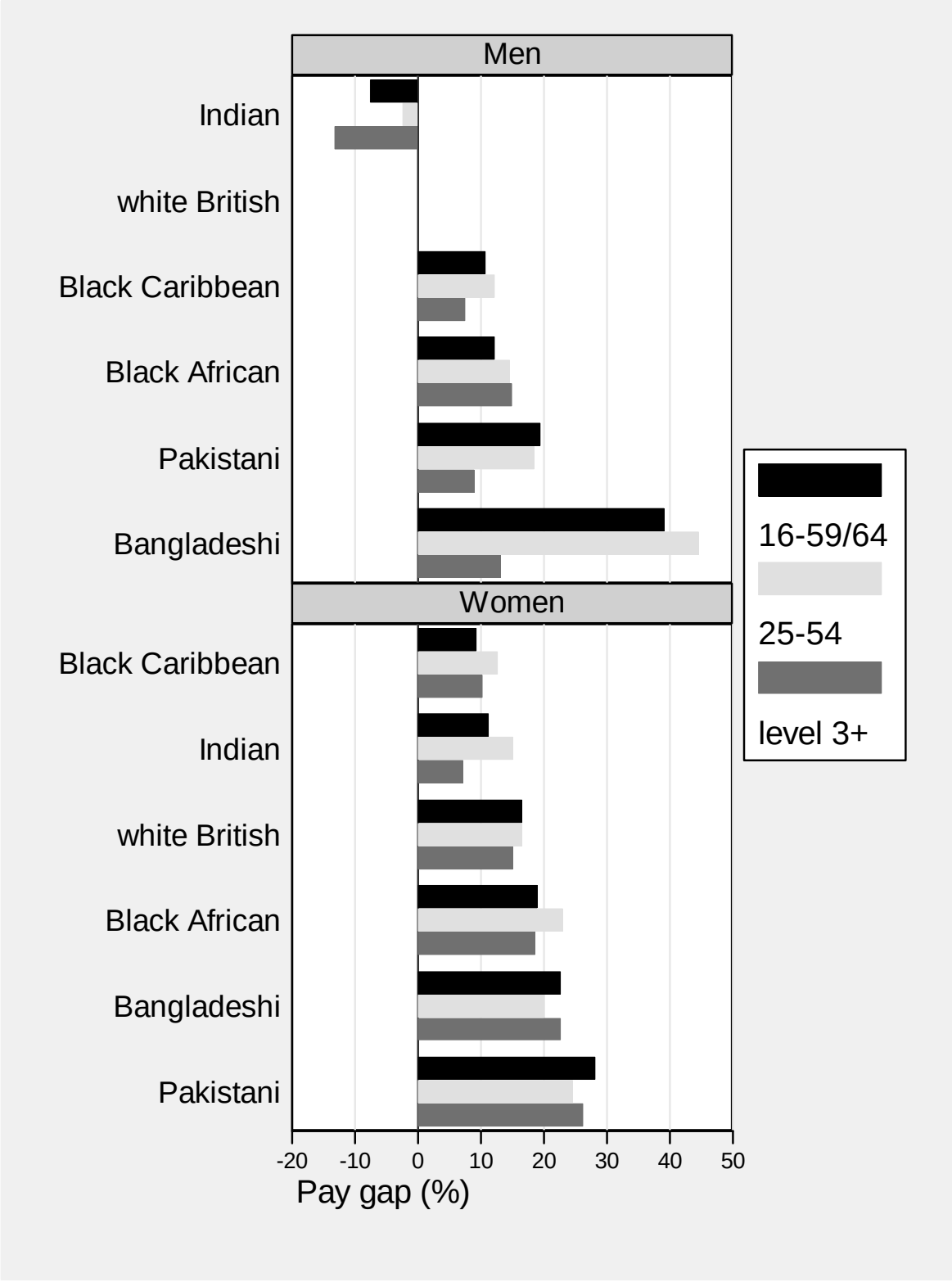
Figure 3.3 Pay gaps in full-time hourly earnings, those aged 16-64/59 and qualified at level 3 and above, by ethnic group for men and women



Source: Quarterly Labour Force Survey, 2001-2005, weighted data

In order to see some of these variations more clearly, and to summarise the pay gap results presented up to this point, Figure 3.4 gives the gaps separately for men and women broken down by: all, restricted age range (25-54), and whether qualified at level 3 and above. It shows the gaps ranked in order of the overall gap. It is worth noting that when comparing within sexes, the ranks of ethnic groups are different for men and women. This graph shows that the role of higher level qualifications in reducing the pay gap is stronger for men than for women, with the exception of Black African men where the gap actually increases. The consistently better situation of Indian men in relation to pay is also evident from Figure 3.4, as is the poor situation of Pakistani women.

Figure 3.4 Full time pay gaps for men and women by ethnic group: all aged 16-64/59; all aged 25-54, and those with level 3 qualifications and above



Source: Quarterly Labour Force Survey, 2001-2005, weighted data

Introducing sub-population examinations of pay gaps, such as in relation to qualifications levels and attempting to see how much can be understood by this

moves us in the direction of multivariate analysis of pay differentials. Such multivariate analyses, as discussed briefly above, attempt to hold constant all relevant factors influencing pay to ascertain if differences remain once 'like is compared with like'. There are a number of studies which investigate whether an 'ethnic penalty' in pay exists, referred to above, and whether this could be identified with a discriminatory labour market (Carmichael and Woods, 2000; Blackaby et al, 2005; Heath and Cheung, 2006). However, not only is such an analysis beyond the scope of the current paper, the stress on comparing 'like with like' (if that were ever possible) is at variance with the main emphasis of this paper, which is to summarise the aggregate effect of all sorts of sources of labour market disadvantage as they are reflected in pay.

Just as women do different jobs from and have different employment patterns and career trajectories to men, so ethnic groups, and men and women from the different ethnic groups, differ according to a range of labour market characteristics. The fact that ethnic minority groups occupy different occupational sectors, have different employment histories (and risks of interruptions to employment) as well as different levels and types of qualifications and skills should not be factored out in evaluating their pay disadvantage. The complexity and interaction of different factors that all take place within a society that is stratified on a range of levels, including ethnicity, result in the sometimes extremely large pay gaps that we have observed here. These can reach around 40 per cent for the gap experienced by Bangladeshi men in full-time employment, which means that for every pound a White British man in full time work can expect to earn, a Bangladeshi man can expect to earn 60p. It is all the factors that contribute to that difference that should be our concern.

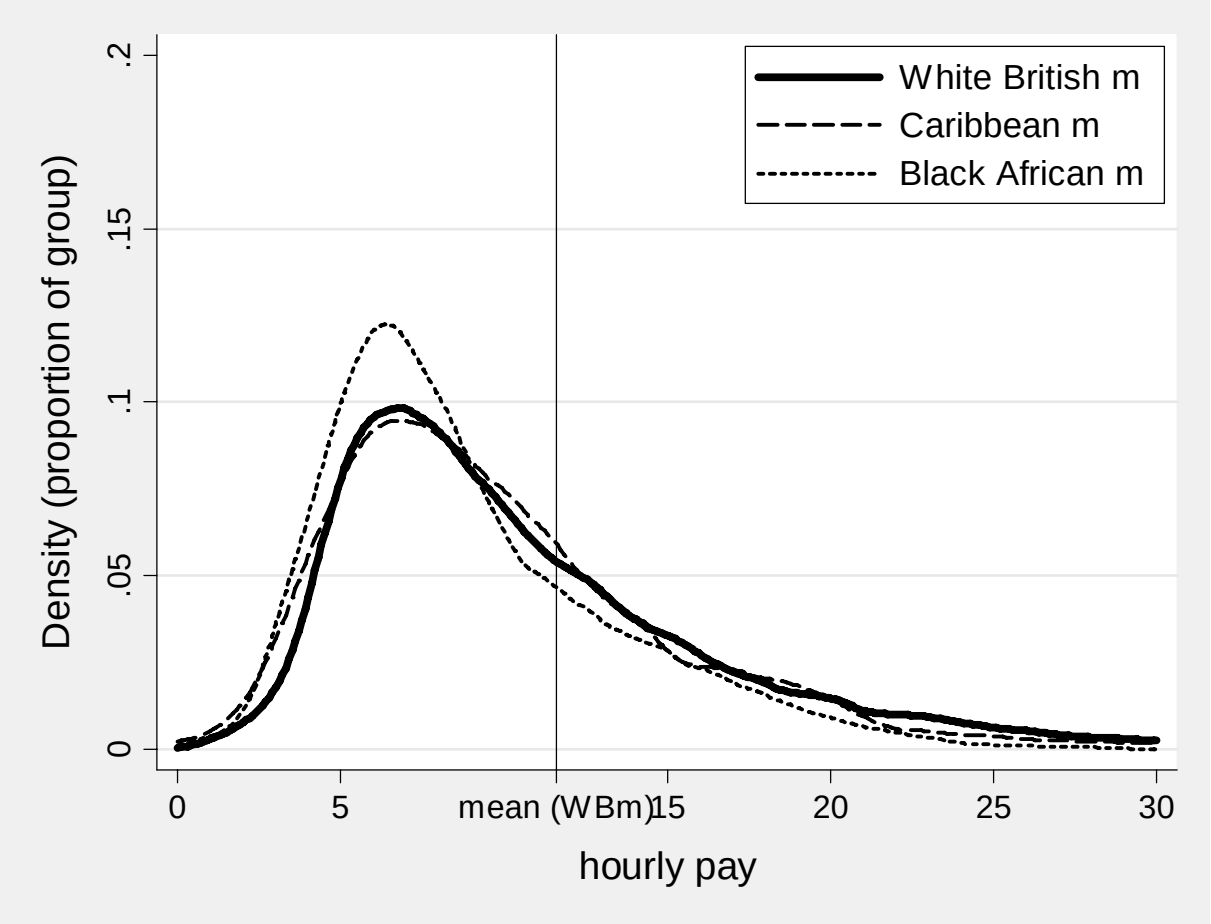
4. THE DISTRIBUTION OF EARNINGS AND PART-TIME/WEEKLY PAY GAPS

4.1 Overall distribution of earnings

In this section we consider not just the mean earnings, but the overall distribution of earnings across the different groups and the implications of these. That is, rather than looking at simply a central point in the earnings of a group we look a how higher earners and lower earners are spread across the group. From the mean alone, we do not know if most of a group earns around that much or whether some earn much more while others earn much less. The earnings distributions for the different ethnic and gender combinations are illustrated in Figures 4.1 to 4.4, with the earnings of white British men as a reference point in each (represented by the solid line). Figures 4.1 to 4.4 also show where the mean earnings of white British men fall (represented by the straight line at £11.59). The mean typically falls above the point where most earnings are concentrated, which is in the higher parts of the curve. This is because the high (sometimes very high) earnings of a relatively small number of people can 'pull up' the average. Indeed, these figures do not show the small number of people earning above £30 per hour – but such earners nevertheless affect the mean, and to a different degree for different groups, given the variations in numbers of high earners and in their earnings.

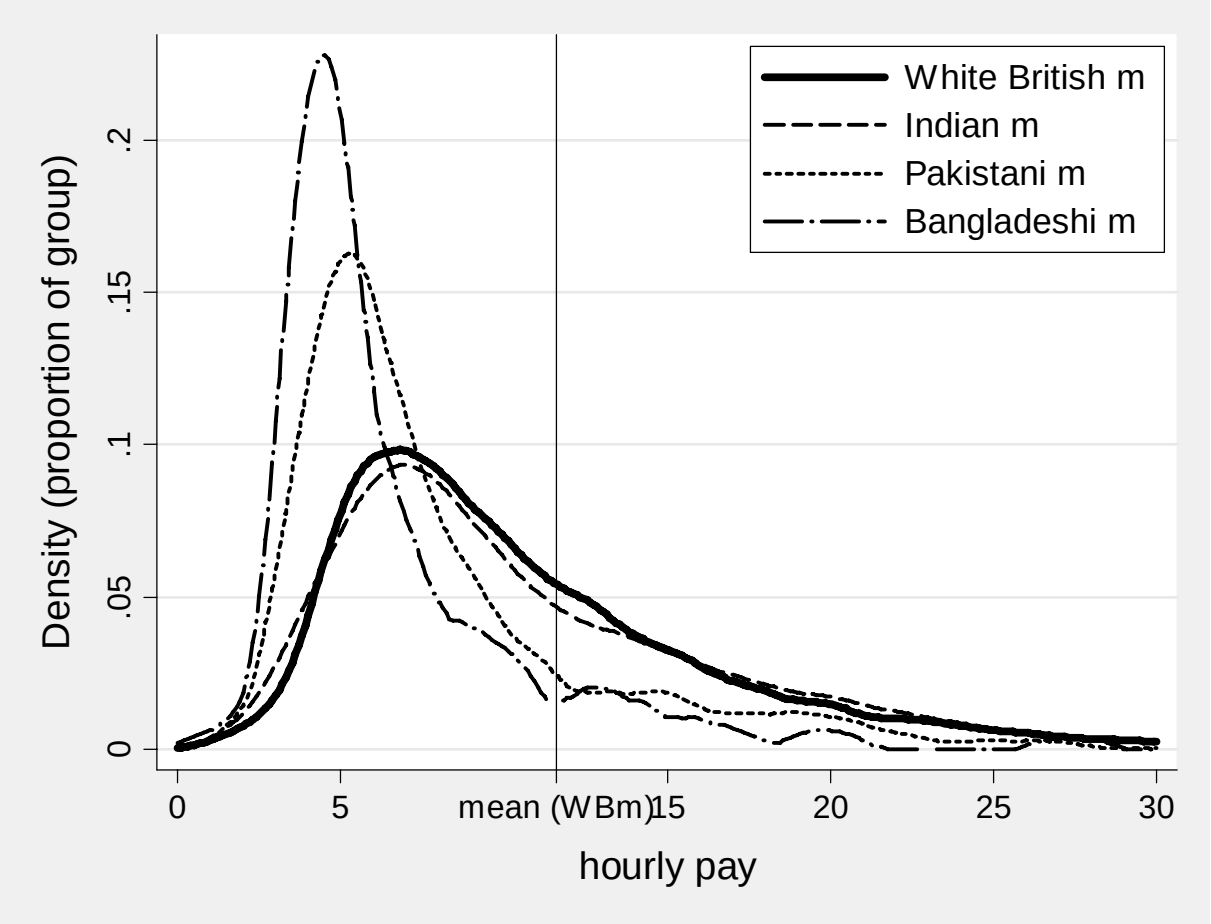
As Figures 4.1-4 show, all the minority and gender groups have distributions that fall somewhat to the left (lower earnings) of the White British men's earnings. The exception is Indian men where the distribution tracks that of White British men quite closely, though it still has a slight bulge to the left. The Bangladeshi and Pakistani distributions are not only shifted to the left but peak sharply within quite a narrow range. The mean and median fall quite close together for these groups, therefore, whereas for White British men the mean is substantially further to the right.

Figure 4.1 Earnings distribution: White British men, Black Caribbean men, Black African men



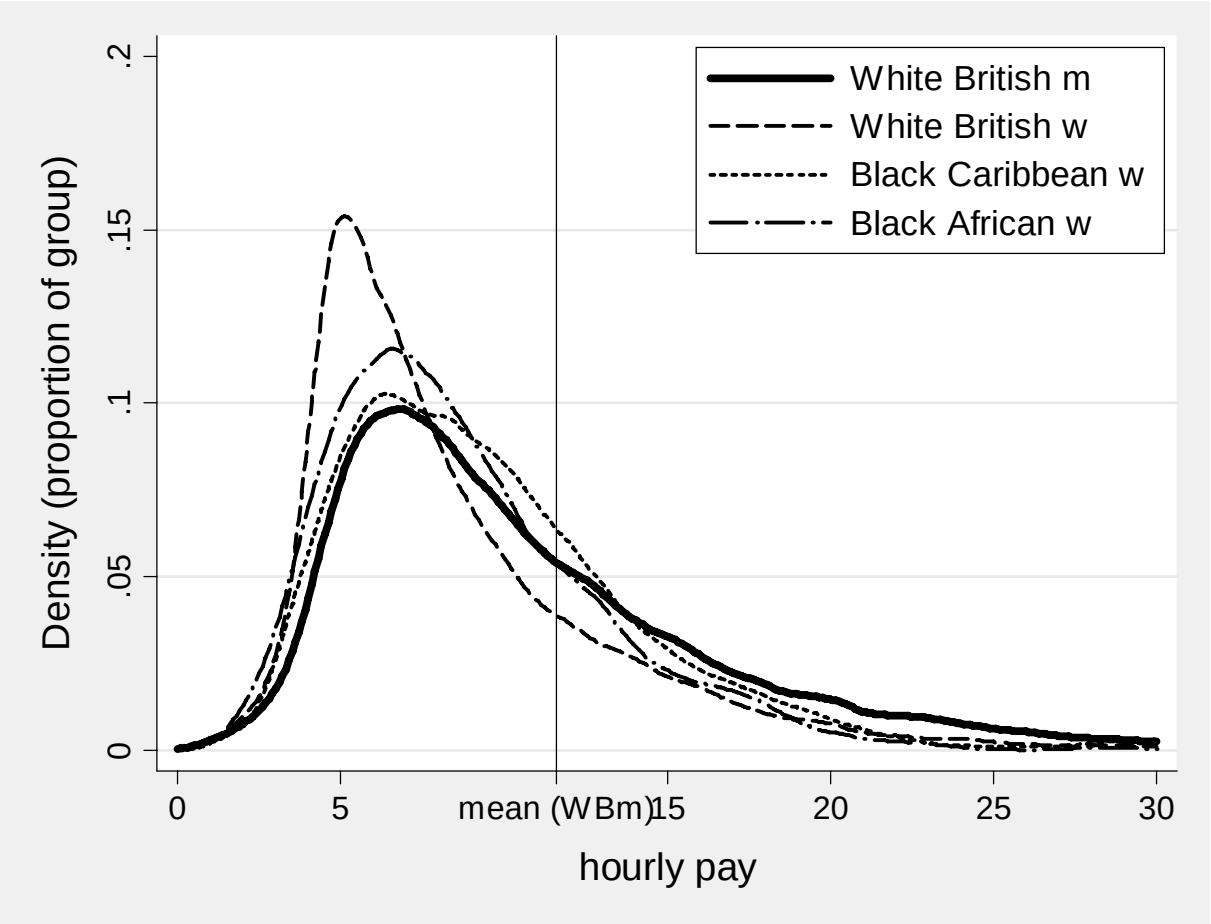
Source: Labour Force Survey, 2001-2005, weighted data

Figure 4.2 Earnings distribution: White British men, Indian men, Pakistani men, Bangladeshi men



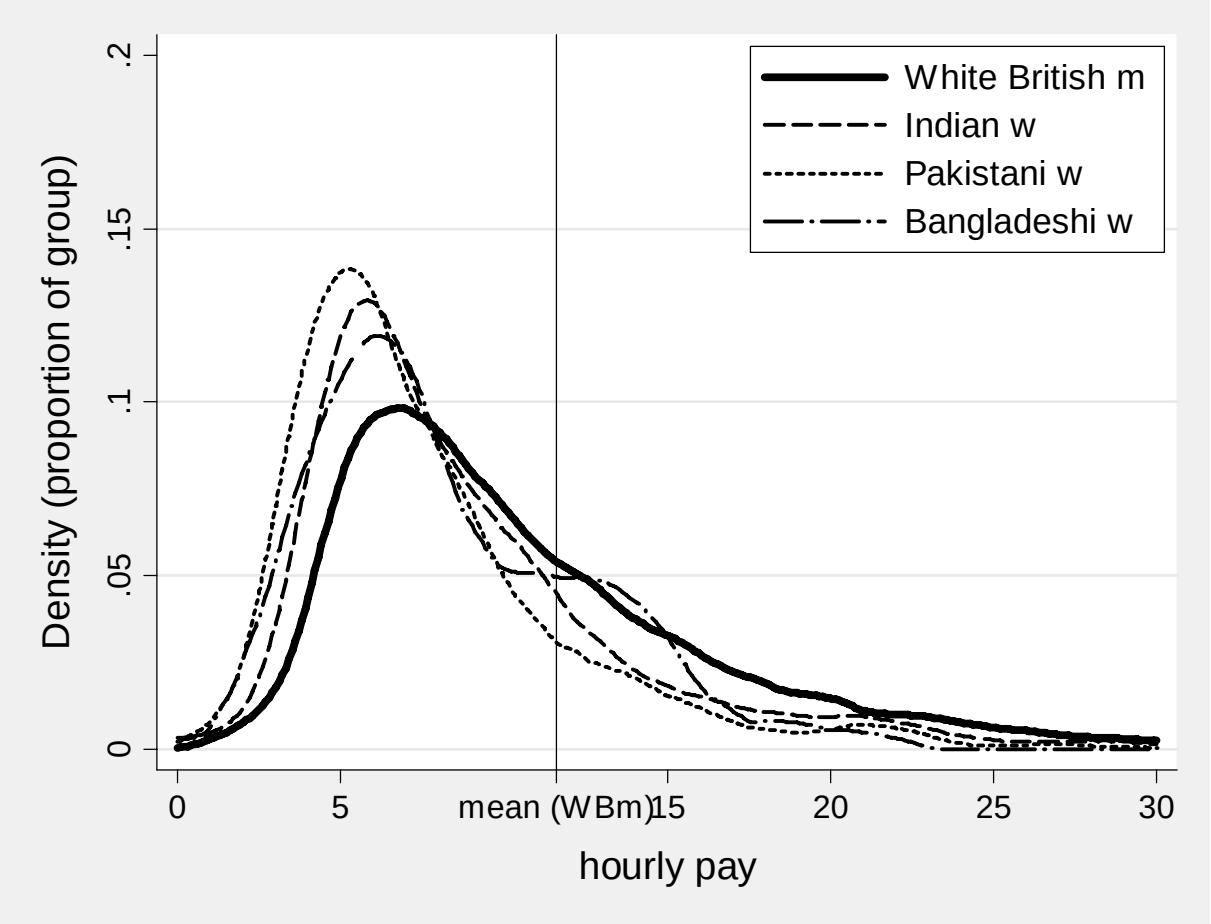
Source: Labour Force Survey, 2001-2005, weighted data

Figure 4.3 Earnings distribution: White British men, White British women, Black Caribbean women, Black African women



Source: Labour Force Survey, 2001-2005, weighted data

Figure 4.4 Earnings distribution: White British men, Indian women, Pakistani women, Bangladeshi women



Source: Labour Force Survey, 2001-2005, weighted data

4.2 Pay gaps at different points in earnings distribution

We can also consider the contribution of distributions of earnings and their role in contributing to the average pay gap by considering variation in the size of the gap at different points in the income distribution. Tables 4.1 and 4.2 show the gap at the mean – as was illustrated in Tables 1a and 1b – and compares that with the distribution at the 25th percentile, the 50th percentile (the median) and the 75th percentile. That is, it compares the gaps at earnings at or below which 25 per cent of the group falls (the 25th percentile), at the level of earnings which divides the higher earning half from the lower earning half of the relevant group (the 50th percentile or median), and at the level which distinguishes the top 25 per cent of earners in the group from the rest (the 75th percentile). In each case the gap relates to the respective point for white British men in full-time work.

Among White British, Indian, Black Caribbean and Black African women, the pay gap increases as they earn more. That is, higher earning white British men outstrip the earnings of relatively high-earning women from these groups, giving these men a

greater pay advantage than that experienced by their lower paid counterparts relative to lower paid women from these groups. However, for Pakistani and Bangladeshi women, the gap stays consistently high. That is, they are equally disadvantaged at the lower and upper ends of the earnings distribution.

For men, the patterns would appear to be similar to women for the different ethnic groups. There is an increase in the pay advantage of Indian men as the earnings distribution increases and some indication of an increase in the pay gap for Black Caribbean and Black African men, but an even impact across the distribution for Pakistani and Bangladeshi men.

Table 4.1 Pay gaps at different points in the full-time hourly earnings distribution, by ethnic group: Men

Ethnic group	Mean gap	25th percentile gap	Median gap	75th percentile gap
Indian	-7.5	0.5	-0.7	-8.1
Black Caribbean	10.7	7.9	4.0	10.5
Black African	12.2	3.7	11.2	9.5
Pakistani	19.5	22.6	24.1	23.5
Bangladeshi	39.1	39.7	45.4	33.4

Source: Labour Force Survey, 2001-2005, weighted data

Notes: the reference category for each gap is White British men's earnings at the relevant percentile

Table 4.2 Pay gaps at different points in the income distribution, by ethnic group: Women

Ethnic group	Mean gap	25th percentile gap	Median gap	75th percentile gap
White British	16.7	12.1	15.0	16.1
Black Caribbean	9.4	-5.9	-1.0	11.3
Indian	11.3	8.1	10.9	13.4
Black African	19.0	4.3	10.5	16.3
Bangladeshi	22.8	12.4	18.6	12.7
Pakistani	28.2	27.9	23.0	26.3

Source: Labour Force Survey, 2001-2005, weighted data

Notes: the reference category for each gap is White British men's earnings at the relevant percentile

4.3 Part-time pay gaps

The third part of this chapter briefly considers the choices in measuring the pay gap made in this report and their implications. The pay gaps have all been based on

comparing average full-time hourly earnings across the different categories with the reference groups. An alternative measure is to use weekly, rather than hourly pay as the basis of comparison. Thinking of pay in terms of weekly earnings as well as hourly pay may offer a more realistic assessment of differences in income, but on the other hand does not take account of the fact that some may need to spend more hours than others to reach the same level of weekly pay.

On the other hand, the hourly pay gaps for part-time work are distinctive, not because of the number of hours worked, but because those working in part-time jobs earn, on average far less than those working in full-time jobs. Therefore, in this and the following section part-time pay gaps are illustrated for the different ethnic groups and for men and women (relative to White British men's full-time earnings), and the pay gaps in weekly earnings for those in full-time work.

Tables 4.3 and 4.4 show the rates of part-time pay for men and women from the different ethnic groups and their pay gaps relative to White British men's full-time earnings. They illustrate the low returns to part-time pay and the consequent large-scale pay gaps across the board. Figure 4.5 shows this information in graphical form.

Table 4.3 Hourly earnings in part-time work and pay gaps relative to White British men's full-time earnings, by ethnic group: Men

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	7.78	32.9	29.3	36.4
Indian	6.18	46.7	40.5	52.8
Pakistani	5.30	54.3	50.2	58.4
Bangladeshi	5.61	51.6	45.8	57.3
Black Caribbean	9.94	14.3	-17.8	46.3
Black African	6.51	43.8	38.0	49.6
All minority groups	6.37	45.0	41.7	48.3
All ethnic groups	7.55	34.7	31.8	37.7

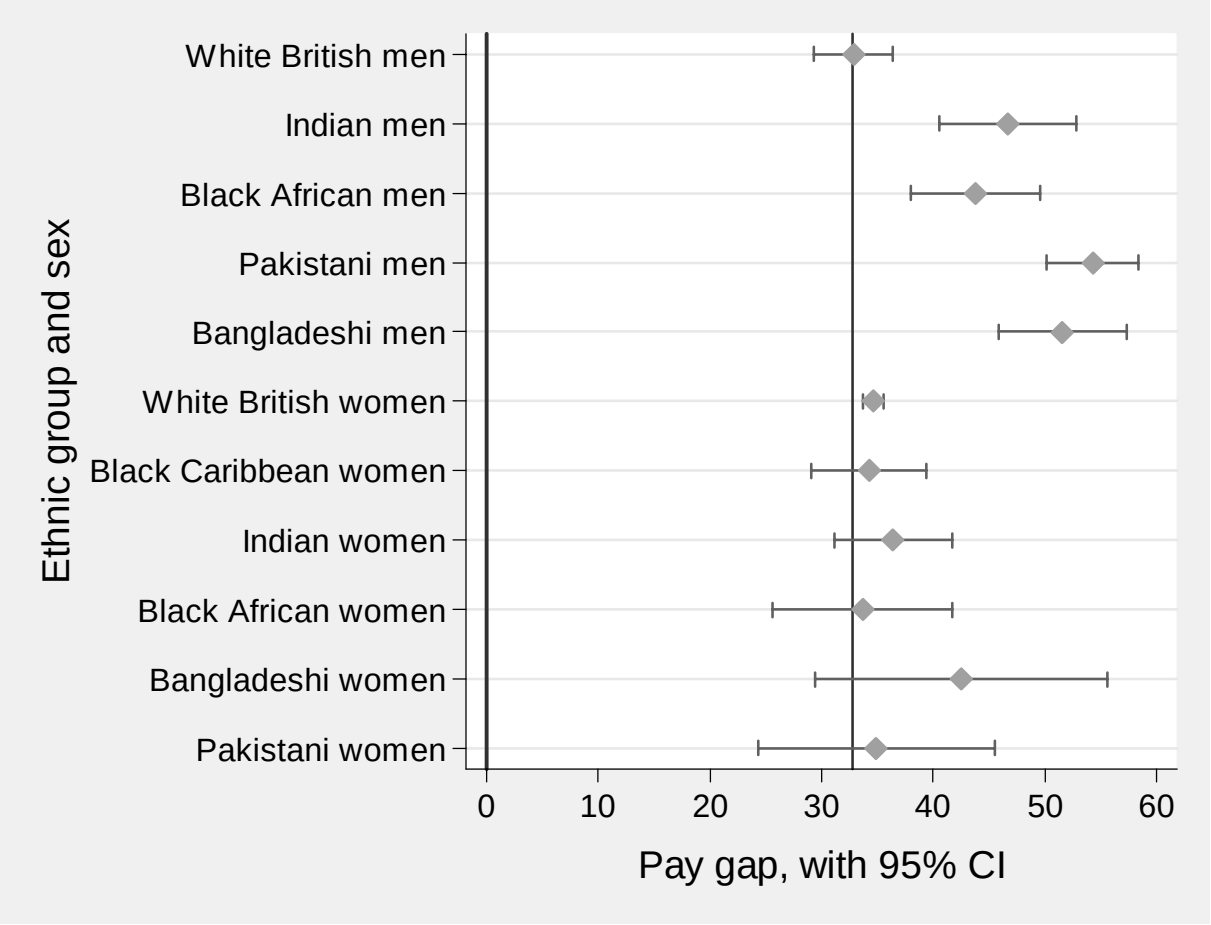
Source: Quarterly Labour Force Survey, 2001-2005, weighted data

Table 4.4 Hourly earnings in part-time work and pay gaps relative to White British men's full-time earnings by ethnic group: Women

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	7.57	34.6	33.7	35.6
Indian	7.37	36.4	31.1	41.7
Pakistani	7.54	34.9	24.3	45.5
Bangladeshi	6.66	42.5	29.5	55.6
Black Caribbean	7.62	34.2	29.1	39.4
Black African	7.68	33.7	25.6	41.7
All minority groups	7.63	34.2	31.3	37.0
All ethnic groups	7.61	34.2	33.4	35.1

Source: Quarterly Labour Force Survey, 2001-2005, weighted data

Figure 4.5 Pay gaps in part-time hourly earnings relative to White British men's full-time earnings, by ethnic group for men and women



Source: Quarterly Labour Force Survey, 2001-2005, author's analysis

Notes: The pay gap for Black Caribbean men has been excluded as it was based on insufficient numbers to create a stable estimate. The dark line reflects the zero pay gap line; the light one is placed at the gap for White British part-time men, relative to White British full-time men.

Figure 4.5 clearly illustrates the pay penalty associated with part-time earnings. For women from all minority groups, the part-time pay gaps are over 30 per cent and they cluster in the region of 34-36 per cent, with the exception of Bangladeshi women, whose estimated pay gap is 42 per cent. However, as Figure 4.5 shows, the confidence intervals around this latter estimate are quite wide. But what is also noticeable about women's part-time pay gaps is how they also cluster close to the pay gap for White British men in part-time work, relative to being in full-time work. Clearly, and as was illustrated above, a far smaller proportion of White British men engage in part-time work than White British women, and at relatively different ages, but those that do experience comparable penalties to those faced by all women in part-time work. Moreover, rates of part-time working are also low for minority group women relative to White British women, and yet, again, those that are in part-time work appear to have broadly comparable rates of pay to their White British counterparts. At first sight, then, gender and ethnic differentiation would appear to be absent from the part-time sector, with an overall level of pay disadvantage that typifies the types of jobs that are, or can be, undertaken part-time.

However, if we turn to look at the experience of minority group men in part-time work, that would not appear to be the full story. As Figure 4.5 graphically shows, the pay gaps for men from minority groups[4] are substantially higher even than those for women in part-time work and those for White British men in part-time work. The pay gaps of 44 per cent and above are extremely large and, as the confidence bands show, the differences from White British men's and women's pay gaps are statistically significant. The gaps for Pakistani and Bangladeshi men are also significantly larger than those for Indian, Pakistani, Black Caribbean and Black African women. Minority group men working in part-time jobs would appear to experience some form of double disadvantage, and constitute a truly marginal workforce.

4.4 Weekly pay gaps

In Tables 4.5 and 4.6 we see, instead, the weekly pay gaps for those in full-time work. Here the hourly rate of pay combines with paid hours that are worked to give weekly earnings. The advantage of looking at weekly earnings is that it reflects more closely what people actual take home with them in terms of pay. The disadvantage is that the gaps are driven by the differences in hours worked, which tend to vary systematically across the sexes, as well as by the value placed on each hour.

[4] This applies to Black African, Pakistani and Bangladeshi men, the estimates for Caribbean men are too unstable to be meaningfully interpreted here.

Table 4.5 Weekly earnings in full-time work and pay gaps relative to White British men's weekly full-time earnings, by ethnic group: Men

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	485.26	Reference category		
Indian	515.71	-6.3	-11.4	-1.2
Pakistani	380.52	21.6	15.6	27.6
Bangladeshi	264.71	45.5	37.9	53.0
Black Caribbean	429.97	11.4	6.3	16.5
Black African	430.29	11.3	5.8	16.9
All minority groups	457.61	5.7	3.2	8.2
All ethnic groups	484.70	Reference category for all women		

Source: Quarterly Labour Force Survey, 2001-2005, weighted data
Notes: As for Table 2.1

Table 4.6 Weekly earnings in full-time work and pay gaps relative to White British men's weekly full-time earnings, by ethnic group: Women

Ethnic Group	Average Pay £	Pay gap %	Confidence intervals for the gap	
			Lower limit	Upper limit
White British	369.22	23.9	23.2	24.6
Indian	397.78	18.0	13.6	22.4
Pakistani	316.71	34.7	28.4	41.1
Bangladeshi	327.20	32.6	23.7	41.5
Black Caribbean	397.58	18.1	14.1	22.0
Black African	368.03	24.2	20.2	28.1
All minority groups	388.55	19.9	17.9	21.9
All ethnic groups	372.98	23.1	22.4	23.2

Source: Quarterly Labour Force Survey, 2001-2005, weighted data
Notes: As for Table 2.2

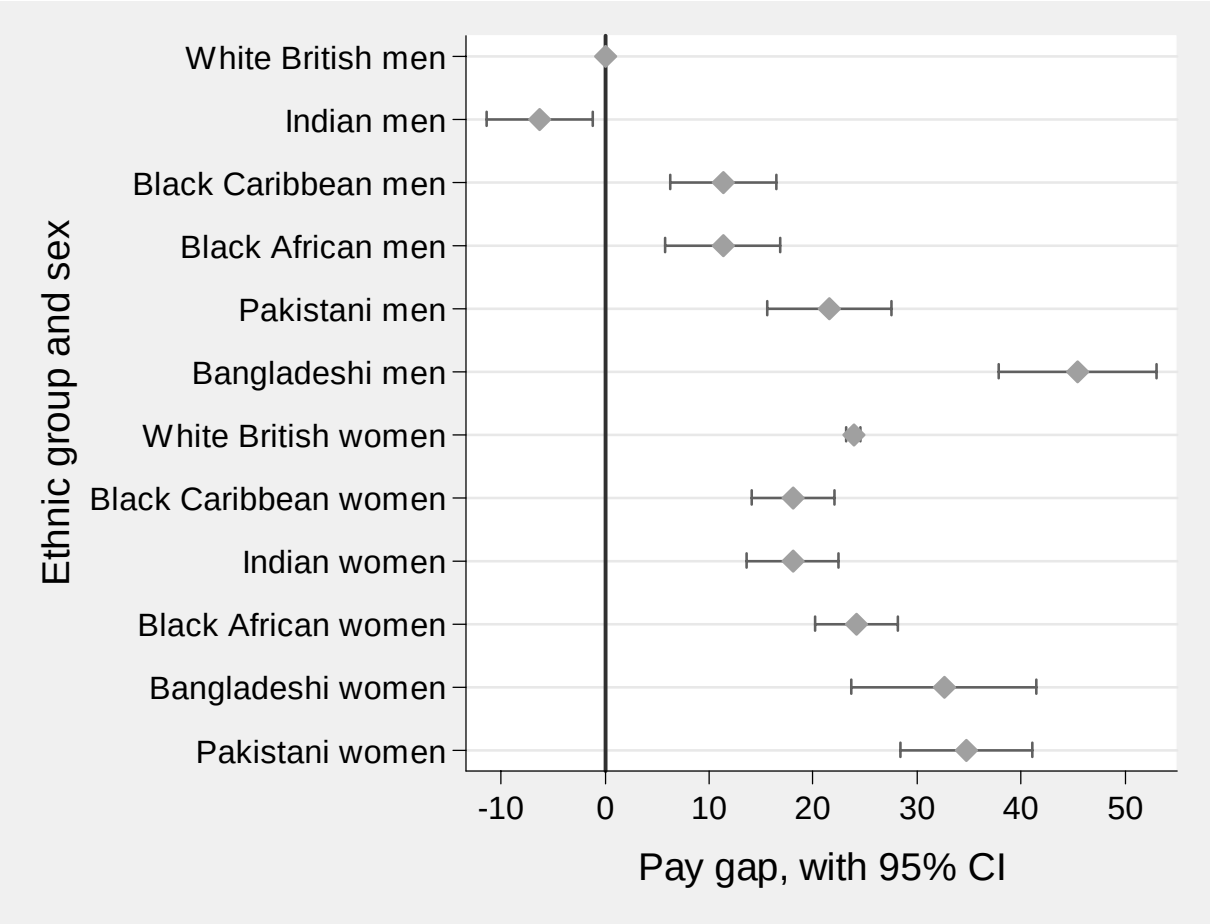
These weekly pay gaps are illustrated in Figure 4.6. Here we can see that the ranking of the pay gaps for women is comparable to that for hourly earnings (Table 1b). However, the size of the gap is bigger in all cases – by between 5 and 10 percentage points. Thus, gaps range from 18 per cent for Black Caribbean and Indian women to over 30 per cent for Pakistani and Bangladeshi women. By contrast, the gaps for hourly earnings ranged from 9 per cent for Black Caribbean women to

28 per cent for Pakistani women. The average weekly pay gap for minority women (20 per cent) is over three times as high as the average weekly pay gap for minority men (6 per cent).

The estimated pay gaps for Black Caribbean women double from 9 per cent (full-time hourly pay) to 18 per cent (full-time weekly pay). This is a dramatic increase; and we can be confident that the increase is a genuine one. By contrast, the weekly pay gap for Caribbean men is very similar to their hourly pay gap at 11 per cent. While Caribbean men (and other minority group men) would appear to have average working hours that are comparable to white British men's and thus similar weekly and hourly pay gaps, Caribbean women in full-time work would appear to work somewhat fewer hours, resulting in an increased deficit. Indeed, most groups of women would appear to work shorter full-time weeks, resulting in less weekly pay to take home: the weekly pay gaps for Pakistani women (35 per cent) and Bangladeshi women (33 per cent) reflect an estimated increase of 7 and 10 percentage points compared to hourly pay gaps, and white British women's pay gaps also increase by 7 per cent. Even though these women are in full-time work, the lower working hours may still, in part, reflect the demands of juggling employment and caring responsibilities, which continue to remain predominantly a female preserve. Indeed, lower rates of part-time work among Caribbean women compared to white British women, and the maintenance of full-time employment alongside caring responsibilities, which contributes to their relatively favourable hourly pay rates, may be achieved through working in sectors where hours are controlled or through the avoidance of longer working hours, which in turn means less favourable weekly pay.

For men on the other hand, the scale as well as the ranking of the pay gaps is very comparable to that in Table 1a for hourly earnings, suggesting that average hours in full-time work are broadly comparable across groups. Thus we see that the gap ranges from -6 per cent for Indian men to 46 per cent for Bangladeshi men, compared with the gap for hourly earnings, which ranges from -8 per cent to 39 per cent.

Figure 4.6 Pay gaps in full-time weekly earnings, by ethnic group for men and women



Source: Quarterly Labour Force Survey, 2001-2005, weighted data

5. CONCLUSIONS

This report has shown the extent of and variation in pay gaps experienced by women and men from different ethnic groups relative to a baseline represented by the earnings of white British men. It has demonstrated a vast range in the labour market disadvantage illustrated in the form of the pay gap and has considered some of the sources of that variation. For pay gaps are both summaries of labour market disadvantage accruing from a range of factors and at the same time indicate only one aspect of that disadvantage; that which relates to the differences in financial rewards from participating in paid employment. They tell us nothing about the disadvantage associated with non-employment (unemployment and economic inactivity), even though there are connections between the two, as I go on to discuss.

Overall, the pay gaps outlined here can be seen as involving the intersection of:

- Individual characteristics, such as qualifications and skills, and the ways particular skills, or sectors of employment are rewarded;
- Employment histories, including the types of experience accumulated, whether in part-time or full-time work, the country in which experience was gained, interruptions to continuous employment through unemployment, sickness or caring;
- Discrimination, on the basis of sex or ethnicity, or both.

Discrimination may also play a role in how individual characteristics are regarded, and even in their attainment (for example in practices in the education system), as well as in interruptions to employment, through increased unemployment risks, or limiting opportunities to participate, or the types of opportunities available.

The net results for those in full-time work were that a substantial full-time, hourly pay gap for women from ALL ethnic groups relative to White men was demonstrated, and for all minority group men except for Indian men. Pakistani women had the highest pay gap among women at 28 per cent and Bangladeshi men had the highest full-time pay gap among men at 39 per cent.

For men from minority ethnic groups, pay disadvantage is largely consistent with other forms of labour market disadvantage. Thus, excepting the slightly distinctive situation of Indian men in terms of pay, larger pay gaps are echoed in higher rates of unemployment, economic inactivity and part-time work. For women, the picture is slightly more complicated, as forms of labour market participation and exclusion reflect different strategies for resolving the competing demands of the labour market and of caring, which even today remains predominantly the responsibility of women.

These in turn have different outcomes in terms of pay, and pay gaps reflect their longer-term consequences.

It is possible to identify three main patterns of responding to the competing claims of caring and earning. One is to take some time off with young children and then to return to part-time work, resuming full-time work as children grow up. This will mean a high level of on-going contact with paid employment, but a substantial amount of it in the part-time sector. The negative impact of part-time experience on pay, along with some total interruptions, with their adverse effects, will lead to substantial pay gaps, even for those resuming full-time employment at some point.

The second pattern is to maintain full-time work alongside caring responsibilities, with little interruption. This will result in similar levels of overall participation to the first group, but will bring the benefits of lower hourly full-time pay gaps. Such a combination is likely to encourage and be encouraged by participation in public sector employment, with its greater regulation of hours and where rates of pay may make this strategy more feasible. On the other hand, the possibility of limiting the full-time hours of work to meet all the demands may mean that weekly pay gaps are somewhat larger than those suggested by looking at hourly pay gaps; and there may, in addition, be social costs (Platt, 2006).

Thirdly, there may be a much greater separation of paid work and caring. The period of bringing up children may be devoted to unpaid family responsibilities, with paid work only occurring before this stage and after the children have left home. This will result in much lower levels of labour market participation overall for these women, and thus the pay gap will simply not apply for much of the time. Those who are in employment will on the one hand be younger, pre-children or delaying, and quite possibly relatively highly qualified, with a positive impact on pay and smaller pay gaps. On the other hand, those who return to paid work after a sustained period of family care will face the penalties in pay associated with such lengthy interruptions, and may face very limited opportunities. To the extent that they are older and thus less likely to have higher qualifications, they may also face a higher pay gap. Thus the average pay gap for this group will aggregate lower and higher gaps for those at earlier and later points on the trajectory, but will not tell us anything about the exclusion or disadvantage faced by the majority, who are in the middle period of non-participation.

If we wished to characterise these patterns in terms of ethnic groups' experiences and as a means of helping to understand the diverse patterns of pay gaps observed, we could, broadly speaking think of the first pattern as that of white British women, the second as characterising the experience of Black Caribbean women, and the

third as being more typical of Pakistani and Bangladeshi women. Such a broad brush characterisation necessarily comes with a number of cautions attached. Clearly, there will be women from each ethnic group whose experience approximates to each of these three patterns – or to none of them. In addition, such stylised patterns do not include all the factors relevant to the overall size of the pay gap, which have been discussed in more detail in the main body of the report. In particular, they do not account for the role of discrimination; but they do show how a lower or similar pay gap cannot be interpreted as a lower or similar level of employment discrimination. Indeed, in the characterisation given above we might expect Pakistani and Bangladeshi women's pay gaps to be rather smaller than they are if there were not the additional impact of discrimination.

Furthermore, while we might think of these different ways of resolving the demands of caring and of labour markets as strategies operating in the face of differing circumstances, the notion of choices in relation to employment participation is not especially meaningful (Berthoud and Blekesaune, 2006). Instead, what is possible or meaningful is shaped both by individual family circumstances – the presence of another earner, their labour market position and earnings, and sources of family income – and the wider environment: the nature, availability, accessibility and rewards of employment. Thus, part-time work may make sense where it is locally available and where a partner is employed with reasonable earnings. Combining full-time work with caring may represent a more plausible outcome where the types of jobs are reasonably secure and reasonably paid and allow some flexibility over hours and where there is no partner with earnings, or where joint earnings are sufficiently high to warrant the costs of childcare. Withdrawing from the labour market may be the only feasible option where opportunities are limited or poorly paid, or both, where risks of unemployment are high, and where a partner has no or low earnings that do not compensate for the costs of participation.

What we see in pay gaps, then, are the aggregate consequences of labour market structures and patterns of participation. While they appear to summarise disadvantage solely in terms of financial rewards for individuals of either sex and from different ethnic groups and thus just one aspect of labour market disadvantage, in fact they cannot be separated from wider processes of inclusion and exclusion, or from expectations of caring. The processes that lead to particular pay gaps for women are intimately tied up with the labour market position of men and its impact at the household level; and ethnic differences in gaps have to be understood as the way the interconnected labour market situation of men and women plays itself out against that of men and women from other ethnic groups.

REFERENCES

Bell, B. D. (1997) The performance of immigrants in the United Kingdom Evidence from the GHS. *Economic Journal,* 107, 33-345.

Berthoud, R and Blekesaune, M. (2006) *Persistent Employment Disadvantage, 1974 to 2003*, ISER Working Paper 2006-9, Colchester: University of Essex.

Blackaby, D. H., Leslie, D. G., Murphy, P. D. and O'Leary, N. C. (2002) White/ethnic minority earnings and employment differentials in Britain: evidence from the LFS. *Oxford Economic Papers,* 54, 270-97.

Blackaby, D. H., Leslie, D. G., Murphy, P. D. and O'Leary, N. C. (2005) Born in Britain: How are native ethnic minorities faring in the British labour market? *Economics Letters,* 88, 370-375.

Blackwell, L. and Guinea-Martin, D. (2005) Occupational segregation by sex and ethnicity in England and Wales, 1991 to 2001. *Labour Market Trends,* 13, 501-511.

Carmichael, F. and Woods, R. (2000) Ethnic penalties in unemployment and occupational attainment: evidence for Britain. *International Review of Applied Economics,* 14, 71-98.

Clark, K. and Drinkwater, S. (1998) Ethnicity and self-employment in Britain. *Oxford Bulletin of Economic and Statistics,* 60, 383-407.

Clark, K. and Drinkwater, S. (2000) Pushed out or pulled in? Self-employment among ethnic minorities in England and Wales. *Labour Economics,* 7, 603-28.

Dale, A., Shaheen, N., Fieldhouse, E. and Kalra, V. (2002a) Labour Market Prospects for Pakistani and Bangladeshi Women. *Work, Employment and Society,* 16, 5–25.

Dustmann, C. and Fabbri, F. (2005) Gender and ethnicity: married immigrants in Britain. *Oxford Review of Economic Policy,* 21, 462-484.

Equal Opportunities Commission (EOC) (2006) *Facts About Women and Men in Britain.* Manchester: EOC.

Felstead, A. and Jewson, N. with Goodwin, J. (1996), *Homeworkers in Britain*, London: DTI and DfEE.

Frijters, P., Shields, M. A. and Wheatley Price, S. (2005) Job search methods and their success: a comparison of immigrants and natives in the UK. *The Economic Journal,* 115, F359-F376.

Heath, A. and Cheung, S.Y. (2006) *Ethnic Penalties in the Labour Market: Employers and discrimination*, DWP Research Report 341, London: Department for Work and Pensions.

Heath, A. and McMahon, D. (1997) Education and occupational attainments: the impact of ethnic origins. In Karn, V. (Ed.) *Ethnicity in the 1991 Census: Volume Four: Employment, education and housing among the ethnic minority populations of Britain.* London: HMSO.

Kyambi, S. (2005) *Beyond Black and White: Mapping New Immigrant Communities,* London: Institute for Public Policy Research.

Lindley, J. (2002) Race or religion? The impact of religion on the employment and earnings of Britain's ethnic communities. *Journal of Ethnic and Migration Studies,* 28, 427-442.

Lindley, J., Dale, A. and Dex, S. (2006) Ethnic differences in women's employment: the changing role of qualifications. *Oxford Economic Papers,* 58 (2): 351-378.

Low Pay Commission (1998) *The National Minimum Wage: First Report of the Low Pay Commission*. London: The Stationery Office.

Manning, A. and Petrongolo, B. (2005) *The Part-Time Pay Penalty*, CEP Discussion Paper 679, London: CEP, LSE.

Olsen, W. and Walby, S. (2004) *Modelling Gender Pay Gaps*, EOC Working Paper Series No.17, Manchester: Equal Opportunities Commission.

Platt, L. (2006) *Assessing the impact of illness, caring and ethnicity on social activity*, CASEpaper 108, London: Centre for Analysis of Social Exclusion, STICERD, London School of Economics.

Shields, M. A. and Wheatley Price, S. (1998) The earnings of male immigrants in England: evidence from the quarterly LFS. *Applied Economics,* 30, 1157-1168.

Sly, F., Thair, T. and Risdon, A. (1998) Labour market participation of ethnic groups. *Labour Market Trends,* December 1998, 601-615.

Thomas, J.M. (1998) Who feels it knows it: work attitudes and excess non-White unemployment in the UK. *Ethnic and Racial Studies,* 21: 138-150.

TUC (2006) *Black Women and Employment*. London: TUC.

Women and Work Commission (2006) *Shaping a Fairer Future*. London: DTI.

Appendix A

Technical note

These pay gap results have been derived from three years' worth of pooled *Quarterly Labour Force Survey* (LFS) data from June-August 2001 to March-May 2005 (i.e. 16 quarters), using responses only from wave 1. Each case therefore represents a unique individual. Specific source details of the 16 quarterly data sets are provided in Appendix B.

The main results are based on hourly pay, a derived variable within the data set based on usual earnings and hours (see LFS documentation for the detailed derivation). Weekly pay also used a derived variable within the data set. Hourly and weekly pay at each quarter have been adjusted for this report to March-May 2005 prices, using the monthly consumer price index, averaged over the relevant three months. Thus average pay is at 2005 prices.

Calculations of average pay and of the resulting pay gap use the person income weights included within the data to take account of survey non-response and of non-response in terms of earnings. Pay gaps are calculated as the gap from equality of the proportion of weighted pay of the group of interest to that of the reference group, typically White British men. In a new departure, and as a result of the caution with which gaps dependent on the relatively small samples provided by minority ethnic groups need to be treated, the tables and figures provide confidence intervals for the pay gaps.

Pay gaps between all men and all women that are quoted in this paper correspond approximately to gender pay gaps derived from the Annual Survey of Hours and Earnings (ASHE). ASHE does not provide earnings information by ethnic group, and thus this paper has used the LFS, the other main source for information on pay and a source which is used to adjust ASHE figures on earnings. Overall gender pay gaps for both full time and part-time earnings using the LFS tend to be slightly smaller than those derived using ASHE. It should be remembered, however, that not only do different sources tend to produce slightly different results but also that the data used here have been pooled over four years, rather than deriving from a single year. Some caution should be used, nevertheless, in extrapolating from these specific ethnic-gender pay gaps to overall gender pay gaps for the population.

For the additional tables and figures employed in the discussion of the pay gaps (Tables 2.3 to 2.6 and Figure 2.2), a pooled set of 12 quarters of the *Labour Force Survey* from Summer 2002 to Spring 2005 have been used. In this pooled data set all waves have been included, and person weights have been applied.

APPENDIX B:

Sources

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, September - November, 2004 [computer file]. Colchester, Essex: UK Data Archive [distributor], February 2005. SN: 5086.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, September - November, 2003 [computer file]. 3rd Edition. Colchester, Essex: UK Data Archive [distributor], June 2005. SN: 4805.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, September - November, 2002 [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 4626.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, September - November, 2001 [computer file]. 6th Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 4468.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, March - May, 2005: Public Use Data [computer file]. Colchester, Essex: UK Data Archive [distributor], July 2005. SN: 5211.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, March - May, 2004 [computer file]. Colchester, Essex: UK Data Archive [distributor], August 2004. SN: 4998.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, March - May, 2003 [computer file]. 3rd Edition. Colchester, Essex: UK Data Archive [distributor], June 2005. SN: 4712.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour

Force Survey, March - May, 2002 [computer file]. 3rd Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 4547.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, June - August, 2004 [computer file]. Colchester, Essex: UK Data Archive [distributor], November 2004. SN: 5043.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, June - August, 2003 [computer file]. 3rd Edition. Colchester, Essex: UK Data Archive [distributor], June 2005. SN: 4751.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, June - August, 2002 [computer file]. 3rd Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 4600.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, June - August, 2001 [computer file]. 5th Edition. Colchester, Essex: UK Data Archive [distributor], April 2004. SN: 4448.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, December 2002 - February 2003 [computer file]. 2nd Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 4664.

Office for National Statistics. Socio-Economic Statistics and Analysis Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, December 2003 - February 2004 [computer file]. 3rd Edition. Colchester, Essex: UK Data Archive [distributor], June 2005. SN: 4965.

Office for National Statistics. Labour Market Statistics Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit, Quarterly Labour Force Survey, December 2001 - February 2002 [computer file]. 4th Edition. Colchester, Essex: UK Data Archive [distributor], May 2004. SN: 4529.

Office for National Statistics. Socio-Economic Statistics and Analysis Group and Department of Finance and Personnel (Northern Ireland). Central Survey Unit,

Quarterly Labour Force Survey, December 2004 - February 2005 [computer file]. Colchester, Essex: UK Data Archive [distributor], May 2005. SN: 5162.