Full Report

Background

Britain is becoming increasingly multi-ethnic, with the proportion of minority ethnic groups in the population growing by nearly two fold in the last fifty years. The socio-economic condition of the minority ethnic groups has attracted much academic and policy attention, as it is well known that they experience various disadvantages in the labour market, especially with regard to access to the labour market and to advantaged professional and managerial (salariat) positions. It is also well established that there is great variation amongst minority ethnic groups, with Black, Pakistani and Bangladeshi groups being the most disadvantaged. Improving the socio-economic conditions of these groups by providing greater opportunities for upward social mobility has been and still remains a top priority for the government, as it is not only concerned with issues of social justice and civic liberty, but with the future economic prosperity of all members in the society, and indeed with the future status of the country as a major player in an ever-increasing globalised world.

Earlier studies of racial discrimination were mostly qualitative and small-scale (Daniel, 1968). More systematic research on ethnic disadvantages using quantitative data began to flourish in the mid 1990s when the 1991 Census, particularly the Samples of Anonymised Records (SARs) from the Census, were released to the academic community (Karn, 1997; Li, 2004). Since 2001, ethnic data have been available in all large-scale government and academic surveys, and research using more recent data has continued unabated. Whereas much of the research was concerned with the socio-economic situation of the minority ethnic groups at snap-shots of time (Heath and McMahon, 1997; Carmichael and Woods, 2000; White, 2002; Dale, 2002; Dale et al, 2000, 2002; Heath, Martin and Bearten, 2003; Heath and Yu, 2004; Brook, 2005; Li, 2005), there has also been research that looks at the longer-term patterns and trends of employment and occupational profiles of the minority ethnic groups (Iganski and Payne, 1996, 1999; Berthoud and Blekesaune, 2006; Lindley, Dale and Sex, 2006; Cheung and Heath, 2007; Li and O'Leary, 2007).

Research on ethnic disadvantages is usually guided by two theoretical approaches. The 'human capital' approach stresses the role of education, experience, job-related skills and training, and language fluency (Mincer, 1974; Borjas, 1992, 1995). The 'social capital' approach emphasizes the benefits gained from formal and informal social networks in job searching, especially from bridging social capital, that is, social connections which extend to people in different ethnic groups and social positions and which may be assumed to be of particular importance in getting access to mainstream labour market (Granovetter, 1973, 1974; Lin et al, 1981; Lin, 2001; Bourdieu, 1985; Portes, 1998; Putnam, 2000; Peterson, Saporta and Seidel, 2000). It is, however, worth noting that the two approaches are complementary rather than mutually exclusive. Existing research shows that people with higher levels of human capital tend to have higher levels of social capital (Lin, 2001; Li et al, 2002; Li, Savage and Pickles, 2003, 2005; Li, Savage and Warde, 2006; Li and Marsh, 2007). Conversely, minority ethnic groups may have lower levels of both human and social capital, which, coupled with prejudice and discrimination from employers or the wider society, may have an important adverse impact on their labour market aspiration, participation and upward mobility (Heath and Li, 2007).

Yet, although much research has been conducted on various facets of ethnic disadvantages, little systematic research is available on the long-term patterns and trends of socio-economic integration of the minority ethnic groups in Britain. Nor was there much research aimed at providing empirical evidence for the debate between the human and the social capital theories, and for the government policy initiatives. It was with this in mind that the present research project was proposed and conducted using the most authoritative government data sources, namely, all the General Household Survey (GHS) and the Labour Force Survey (LFS) series available at the time of research, spanning a long period from 1972 to 2005.

Objectives

The aim of the project was to conduct a systematic research on the labour market position of the minority ethnic groups in Britain, to compare the inter- and intra- generational experience of the minority ethnic groups in the British labour market both amongst themselves and between them and the White British population, to assess the extent and the nature of 'ethnic penalty', particularly that as experienced by the second generation, and to provide evidence for the debate between human capital and social capital theories on ethnic disadvantages and for policy-making.

We would like to report here that, in our original proposal, we intended to match the analysis of the ethnic political support with the analysis of the ethnic labour market situation. We made a careful exploration of the availability of ethnicity and political attitudes/behaviours data in the BES/BSAS datasets (see Table 1, Appendix 2). The results showed that there was insufficient information on the minority ethnic groups prior to 1996 and that, even after 1996, the sample sizes for the various ethnic groups were too small and the minority ethnic groups were underrepresented in the datasets as compared with the GHS/LFS or with the SARs. This suggested to us that one could not conduct a meaningful analysis on the trends of political support of minority ethnic groups in a way that would run parallel to the analysis on their labour market position in the period of time covered (1972-2005) We therefore decided to focus our efforts on the labour market position of the minority ethnic groups based on the pooled GHS/LFS (see Table 2, Appendix 2 for the ethnic distribution in each year from 1972-2005). We also made a comparison between our pooled GHS/LFS data with the SARs from the 1991 and the 2001 Censuses, and the data show great comparability, for many of the key variables we constructed including ethnicity. This gave us great reassurance with regard to our efforts (see Table 3, Appendix 2). We shall conduct separate research on the political support of the minority ethnic groups (1996-2005) in future. We believe that our decision to focus on the labour market situation was a timely and effective one, not only because the socio-economic position of the minority ethnic groups was itself an academically very important area of research with significant policy implications but also because, and more importantly so given the very limited time scales available to us for the project, this has allowed us to focus our efforts and to engage more fruitfully with the academic debate. We hope that our research outcomes have shown this to be the case.

Methods

Unlike many other projects including those we had previously conducted, this project entailed a substantial part of the effort to be devoted to data management, that is, to standardise the key variables across many datasets and over a long time period. As our work proceeded, more data became available from the Data Archive, and we decided to use all the datasets available on the GHS/LFS series, that is, from 1972 to 2005. Thus all the GHS datasets from 1972 to 2005 were used; and all the LFS datasets from 1983 to 2005 were also used (there were insufficient ethnic data in the earlier years of the LFS). The LFS became quarterly with a panel structure from the spring season of 1992 onwards. As Wave 1 data are obtained from face-to-face interviews (Waves 2-5 were telephone interviews with about 30% proxy answers), the data are presumably more reliable. We pooled all wave 1 data in each season of each year from 1992 to 2005 and sorted out the files by year. Altogether, 110 datasets were used in the GHS/LFS series.

We would like to acknowledge here our sincere gratitude to Jane Roberts at Oxford University and to the ESDS team at Manchester University for the helpful work they did on some of the earlier files, and on the user-guides they wrote on the GHS and LFS datasets. We benefited a good deal from their work and we also provided our expertise to the ESDS team on constructing 'consistent over time' (COT) variables for educational qualifications in the whole of the GHS/LFS series. We would also like to say that even though their support was no doubt very

important and helpful, it was our efforts that brought the dream to life.

The construction of COT variables for the GHS/LFS surveys was an exceedingly difficult and time-consuming task, demanding meticulous care to detail. This is because many of the data set used different coding schemes in the source files. Frequently, variable names lack any indication of the content (such as var28 for sex in GHS 1983). In almost every data set, seemingly similar variables point to the same referent but we had to check the detailed numbering and labelling of the categories in each of the variables carefully in order to find out which variable to choose and how to recode it, such that the resulting variable are consistent with the correspondent variables in the other datasets. Every key variable in every dataset was thus meticulously checked, recoded and syntaxed. Countless hours were spent on the harmonisation process.

The variables selected for standardisation were those that we deemed to be essential for our analysis, such as ethnicity, generation status, age, marital status, educational qualifications, employment status, class, earnings from the labour market, number of children in family unit, and hours of work. For ethnicity, we differentiated nine main groups: White British, White Irish, White Other, Black Caribbean, Black African, Indian, Pakistani/Bangladeshi, Chinese and Other (including 'Mixed'). This kind of differentiation is more detailed than is available in most existing research on ethnic relations using quantitative data and it has enabled us to conduct a thorough investigation of the economic situation of the various minority ethnic groups in Britain in the period covered. For instance, we have been able to investigate the socio-economic situation of one of the long-standing and largest immigrant groups to Britain, namely, the Irish (from the Republic of Ireland rather than from Northern Ireland). The pooled data set has around 4.7 million records with nearly 420 thousand minority ethnic members. This, to our knowledge, is the largest, most systematic, and most carefully-constructed data source ever assembled covering a long period of thirty-four consecutive years, with all the key variables coded to be consistent over time. This is itself a remarkable achievement given the time constraints.

The efforts on variable harmonisation proved richly rewarding. With the dataset thus constructed, we were able to proceed with our analysis in a theoretically-driven and methodologically-rigorous way. Our analysis was focused on three main areas: employment status, occupation attainment, and earnings in the labour market. Our explanatory variables were age, sex, marital status, ethnicity and generation status, which allowed us to examine the human capital theory associated with the ethnic minority groups and the generation effects (we also used other datasets to test social capital theories, please see below). We usually began by conducting exploratory analysis such as frequency, cross-tabulation, means etc, which were sometimes presented in charts. Following this, we often used logistic, multinomial or ordinary least regression techniques depending on the task at hand. We also used some more sophisticated methods such as Heckman's selection models, propensity score matching (PSM), and the Blinder-Oaxaca / Fairlie decomposition techniques. We were also able to construct variables that represent theoretical assumptions such as 'social class externalities' or 'hyper-cyclical externalities'. Such variables were supposed to be contextual, compositional, and ethnic-specific. For instance, members of a certain ethnic group may not only be rich in human capital, but also have co-ethnics in the community who are successful entrepreneurs or who have obtained professional or managerial positions. Such co-ethnics serve as role models particularly for the younger generation within that group, and for the other members in the group who are striving for upward social mobility. Conversely, an ethnic group may not only have poor human capital themselves, they may lack role models in their community, unable to obtain inspirations for upward social mobility. With regard to the 'hyper-cyclical' thesis, it is often observed that during economic recession, some ethnic groups may be much more vulnerable to unemployment than others. Apart from the lack of human and social capital, and possibly the indulgence in taste of racial discrimination by employers, the geographic concentration of some ethnic groups in run-down inner city areas with few job opportunities and with disproportionately large numbers of unemployed co-ethnics may aggravate their unemployment situation. Thus, there would be a

compositional effect arising from the concentration and pertaining specifically to those groups, with serious impacts on their re-employment prospects. The effects of such ethnic-specific contextual and compositional variables were tested in our analysis.

We also used other data sets such as the Home Office Citizenship Surveys (2003 and 2005) and the SARs (1991 and 2001) where appropriate to conduct some specific analysis on human capital versus social capital debate, as assessed by the relative contributions to the unemployment differentials between the majority and the minority ethnic groups. This is also reported below.

Results

Using the harmonised data, we conducted systematic and rigorous analyses on the labour market position of the minority ethnic groups in Britain in the last three decades. The analyses focused on the following areas: labour market participation by the first and the second generation, and ethnic penalty in employment and occupation, and labour market earnings of the ethnic minority groups. The analyses revealed the patterns and trends of the labour market situation of the minority ethnic groups, enabling us to test human and social capital theories on the socio-economic attainment of the ethnic groups. Most of the results were presented at various conferences or seminars, and in our publications. Here we give a brief overview with some examples.

The summary results are in five aspects: (i) patterns and trends of education, employment and occupation; (ii) occupational attainment by second generation; (iii) ethnic penalty by male minority ethnic groups; (iv) explaining human and social capital contributions to observed gaps in unemployment between majority and minority groups; and (v) age, cohort and period effects in avoidance of unemployment and gaining access to the salariat. The detailed data are presented in Appendix 1. The key points are listed below.

(i) Patterns and trends in education, employment and occupational attainment

A clear picture of the social changes in Great Britain in the last three decades with regard to education (degree levels or above; other qualifications below degree; no qualifications), employment (employed, unemployed and inactive), and occupation (salariat, intermediate and working class) associated with the different ethnic groups is shown in Fig 1-3 for men (aged 16-64) and Fig 4-6 for women (aged 16-59). The patterns and trends can be summarised as follows:

- There was great educational improvement in the last three decades, with the proportion with degrees doubled and that with no qualifications reduced to a third. For both men and women, the White British were neither the most, nor the least, qualified. People of Black African, White Other, Indian and Chinese origins were highly qualified whereas those of Pakistani/Bangladeshi and Black Caribbean (men) heritage were poorly qualified. White Irish people were poorly qualified in the earlier period but caught up with the White British in the past few years.
- White British were generally found to be advantaged in terms of gaining access to the labour market and in avoidance of unemployment in the period covered. Black Caribbean, Black African and Pakistani/Bangladeshi groups were most likely to bear the brunt of economic recession, with around 20 per cent being unemployed in the mid 1980s and the early 1990s, confirming the thesis of 'hyper-cyclical' ethnic unemployment. Most Pakistani/Bangladeshi women were economically inactive throughout the period covered (around 70 per cent).
- With regard to access to the salariat, White Other men (from Australia, New Zealand, US, Canada and Europe) were most likely to be found in such positions whereas men of Black Caribbean, and particularly Pakistani/Bangladeshi heritage were least likely to be found in the positions. White Irish men were mainly doing manual jobs in the earlier half of the period but since the early 1990s have caught up with or even surpassed the White British in gaining access to the salariat.

(ii) Occupational attainment by second generation

How do the second generation minority ethnic groups compare with the first generation? Detailed analysis (Tables 1 and 2 in Appendix 1) shows that, even controlling for age, marital status, education and number of dependent children in household:

- Black Caribbean, Indian and Pakistani/Bangladeshi men in the second generation significant improved their chances in gaining access to the salariat, as compared with their first generation peers.
- Indian, Pakistani and Bangladeshi women experienced significant intergenerational improvement in their access to the salariat.

(iii) Ethnic penalty by male minority ethnic groups

Ethnic penalty refers to the relative effects of ethnicity after controlling for human capital indicators such as age and education. The data in Tables 3 and 4 in Appendix 1 show the effects for men in terms of employment and access to the salariat respectively. The main features that arise from the data are that, holding constant all the personal and socio-cultural factors:

- White Other men generally did better than, and Indian and Chinese men were little different from, the White British men;
- White Irish and Black Caribbean men were making steady progress in gaining access to the salariat;
- Black African and Pakistani/Bangladeshi men were consistently found disadvantaged in employment and in access to the salariat, with increasing net disadvantage over time.

(iv) Explaining human and social capital contributions to gaps in unemployment

Why do minority ethnic groups tend to have higher rates of unemployment? Using data from the Home Office Citizenship Surveys (HOCS 2003 and 2005), we conducted analysis of the unemployment gap between the White and the minority ethnic groups, focusing on the 'contributions' by various (groups of) factors to explaining the gaps (see Table 5 in Appendix 1). The analysis showed that:

- 3.7 per cent of the Whites were jobless but the rates for all other ethnic groups were significantly higher, around 11 per cent for the Black and the Pakistani/Bangladeshi groups, and around 8 per cent for the Indians and the Chinese. The differences between the minority and the majority groups in terms of unemployment rates constitute the 'gaps' to be explained.
- Using the 'Fairlie' decomposition method (Fairlie, 2005), we can work out the percentages of the gaps explained by the various factors subsumed under four headings: human capital, social capital, job refusal and personal/contextual attributes (see Notes to Table 5 for details of the variables included in each set).
- Human capital differences explained 20 per cent of the unemployment differential between the Pakistani/Bangladeshi and the White groups, and 18 per cent for the Chinese. As for social capital, the greatest variances explained were for the two South Asian groups, 8 and 7 per cent respectively. Direct job refusal accounts for 15 per cent of the Chinese gap and 10 per cent of the gap for the Black Caribbean. As the two Black groups were more likely to be female and less likely to be partnered, personal factors account more for their gaps than for the other groups.

(v) Age, cohort and period effects in unemployment and access to the salariat

The analysis of the data in terms of the age, cohort and period effects (Tables 6-8 in Appendix 1) showed interesting results. The analysis, aimed at revealing differences in unemployment and access to the salariat for detailed ethnicity/generation groups, is summarised here for the first and second generation visible minority groups (BME):

- In terms of unemployment, the most pronounced effects pertained to period effects, as the middle period (1981-1996) witnessed the highest unemployment rates; within the

periods, the ethnic disadvantages were self-evident, and for men and for women alike, but the generation effects were rather small; the cohort effects were also as expected.

- With respect to access to the salariat, there are clear age (life-cycle) effects, as well as the period and cohort effects as expected. For men, the BME groups in oldest cohort (born in 1940-49), and the first generation in the second and third cohort (born in 1950-59 and 1960-69) failed to catch up with the White British in terms of gaining access to the salariat, but the second-generation in the three younger cohorts were little different from the White British peers. First generation women in the second and the third cohorts also lagged behind their White British counterparts in gaining access to the salariat.

Overall, while there is clear evidence of ethnic catching up in education and second-generation ethnic women catching up in gaining access to the salariat, access to the labour market still remains a barrier to significant portions of people from Pakistani/Bangladeshi and Black origins, and to men in the groups in particular.

Activities

In the duration of the project's life time and even after the formal completion of the project, we have been invited to give presentations at conferences and seminars. Academics and policy users in many universities and institutions came to request research findings from us. We have also made significant efforts to disseminate our research findings through formal publications.

Conferences and seminar presentations:

'Period, life-cycle and generational effects on ethnic minority success in the labour market', presentation at the KZfSS conference, 5-8 July 2007 in Leipzig, Germany.

'Labour market positions of minority ethnic groups in Britain: 1972-2005', presentation at RSS, invited by ESRC Research Methods Programme, 11 May 2007.

'Employment gaps between first and second generation minority ethnic groups in Britain (1972-2005)', School of Geography, Leeds University, 21, March, 2007, for the UPTAP programme.

'Labour Market Trajectories of Minority Ethnic Groups in Britain (1972-2005)', presentation on 28th Nov. 2006, at LGA, London, addressed to an audience including Ian Diamond, Head of ESRC, John Pullinger, Head of Social Research Division of the ONS, and senior civil servants and academics.

'Ethnicity, Education and Earnings: a new analysis using the PSM', presentation at the Cambridge Conference on Social Stratification 10-12 Sept, 2006.

'Labour market attainment among ethnic groups: evidence from the LFS (1972-2005)', presentation at RGS-IBG, 30th August, 2006. The presentation was well covered in the British and Irish national media such as the Independent, Daily Telegraph, Ireland Education News, Sunday Times and BBC; and attracted the attention of well-established institutions such as the Cabinet Office, the Prime Minister's Strategy Unit, CRE, NEP, DTI, CBI, New Delhi Television NDTV, the BBC Midlands Today; and academics in Harvard, Manchester, Kings, UCL, South Bank Universities.

http://www.einnews.com/search.php?keywords=%22Dr+Yaojun+Li%22&makesearch=yes

http://news.independent.co.uk/uk/this_britain/article1222828.ece

http://www.telegraph.co.uk/news/main.jhtml?xml=/news/2006/08/31/nsurnames131.xml

'Ethnicity, Education and Class Attainment in Britain (1972-2004)', presentation at the BSA, 22 April 2006.

'Socio-economic position and political support of the BMEs in Britain (1971-2004)', presentation at the Understanding Population Trends and Processes (UPTAP), School of Geography,

Leeds University, 30-31 March 2006.

'Exploring income differentials: a comparison between human and social capital approaches', invited presentation at Working Lives Research Institute, London Metropolitan University, 6, Feb. 2006.

'Labour market attainment among ethnic groups: evidence from the LFS (1992-2004)', invited presentation by the ONS and the ESDS on 6th December 2005, at RSS.

Links:

We have established close links with academic and policy users. On the policy and media sides, our links include Dr David Jackson, *Prime Minister's Strategy Unit;* Dr Zamila Bunglawala, Senior Policy Analyst, Better Regulation Executive, Cabinet Office; Dr John Bell, National Employment Panel Business Commission; Dr Stella Mascarenhas-Keyes, Senior Research Officer, Social Exclusion Team, and Mr David Purdy, Head of Research, both at Small Business Service, DTI; Dr Jody Aked, Research Officer, Commission for Racial Equality; Dr John Elliott, Social Affairs Correspondent/Consumer Affairs Correspondent, The Sunday Times; and Satnam Rana, Reporter/Presenter, BBC Midlands Today. On the academic side, out links include Professors Robert Putnam and Mary Waters, both at Harvard; Professors Fiona Devine, Angela Dale, Ed Fieldhouse, Nick Crossley, James Nazroo, and many others at Manchester University; Dr Karen Glaser at UCL; Argyro Kotsogianni at London South Bank University; Dr Paul Lambert at Sterling University; and numerous others.

Outputs

Apart from our dissemination at conferences and seminars noted above, we have got five academic outputs as follows:

Heath, A. and Y. Li. (2007) 'Measuring the size of the employer contribution to the ethnic minority employment gap', consultation paper for *NEP*.

Heath, A. and Y. Li (2007) 'Period, life-cycle and generational effects on ethnic minority success in the labour market', forthcoming, *KZfSS*.

Li, Y. and Heath, A. (2007) 'Ethnic minority men in British labour market (1972-2005)', forthcoming, *International Journal of Sociology and Social Policy*.

Li, Y. and Heath, A. (2007) 'Employment status of 1st and 2nd generation minority ethnic groups in Britain: A tale of 35 years', *ESRC: Britain Today*, (March 2007: p. 95)

Li, Y. and Heath, A. (2007) 'Patterns and trends of minority ethnic disadvantages in British labour market: A tale of 35 years', forthcoming, *ESRC: UPTAP Bulletin*.

We have also got a harmonised dataset which we are sending to the Data Archive. We are also sending a copy to the UPTAP programme as requested by Professor John Stillwell at Leeds University who is the coordinator of the programme.

Impacts

As shown above, many policy-making institutions and academics from prestigious universities have been interested in our work. Our research may also have had impacts on the research activities of the other researchers who attended our various presentations and seminars. We believe that as the time goes on, and as we continue our work in this area, especially if our new research proposal at UPTAP Phase 2 is granted, our work on ethnic labour market position, along with the research on socio-political capital (Yaojun Li has a keen interest in socio-political capital and has published significant research findings in the area) will make even greater impacts both in Britain and abroad.

Future Research Priorities

We are currently conducting more analyses. The following are our research priorities in the next phase of work:

First, we are working on the income data. We have made various explorations such as presented at the Cambridge Social Stratification Conference (Sept. 2006), and will refine the analysis. The provisional plan is to get a piece on:

Li, Y. and A. Heath. (2007) 'Explaining income differences between ethnic groups in British labour market (1972-2005)', in writing and proposed to be submitted to the *American Journal of Sociology*.

Secondly, Professor Roxane Silberman from the Ecole Normale Superieur (a very prestigious institution in France) has been in contact with us and we would like to do a joint research with the working title as:

Li, Y., A. Heath and R. Silberman (2007) 'Minority Ethnic Groups in British and French Labour Markets (1985-2005', in planning and proposed to be submitted to the *European Sociological Review*.

Thirdly, Professor Frank Kalter at Leipzig University, Germany, has also expressed interest to conduct collaborative research with us using comparable British and German data.

Fourthly, we have made another proposal to the ESRC's UPTAP Phase 2 on 'Understanding processes of ethnic disadvantages in the British labour market' (Li and Heath, 2007). If successful, it would give us a unique opportunity to conduct a more systematic research than hitherto available on unpacking the 'contributing' factors to observed gaps between the White British and the minority ethnic groups in terms of employment, occupation and earnings. We intend to use decomposition methods for continuous and binary outcome variables, namely, the Blinder-Oaxaca technique for continuous outcome variables and the Fairlie technique for categorical outcome variables (see Blinder, 1973; Oaxaca, 1973; Fairlie, 2005). We also wish to conduct a more systematic research on social capital impacts on ethnic minority groups using all the available data in the LFS panels from 1992 to 2007.

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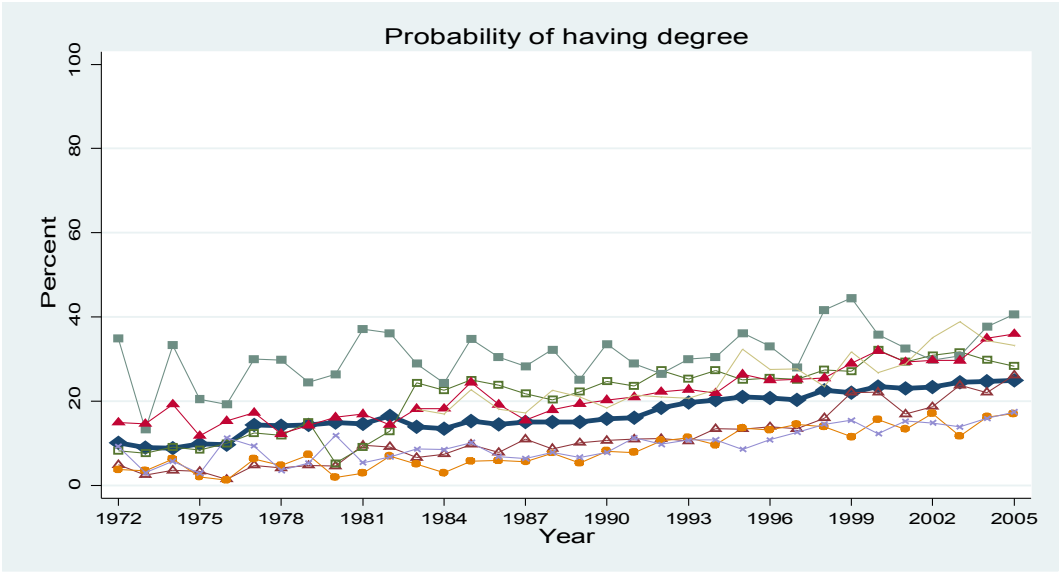
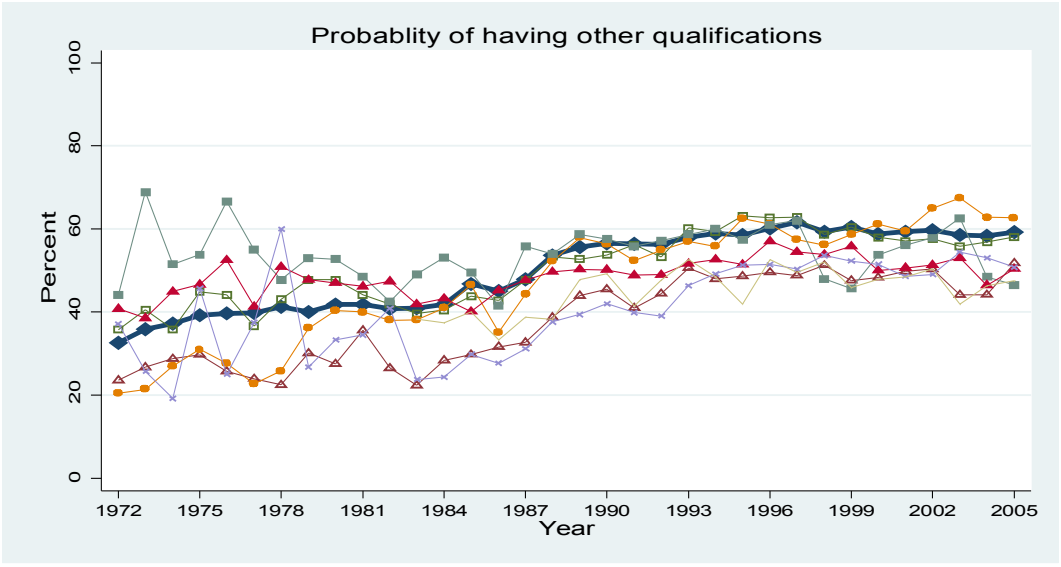
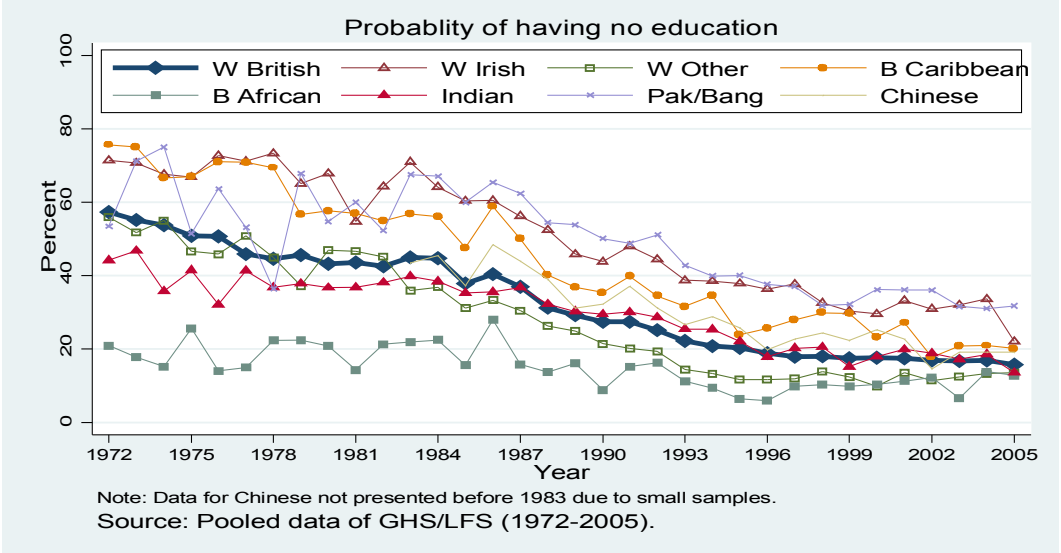
Appendix 1 Tables and Figures

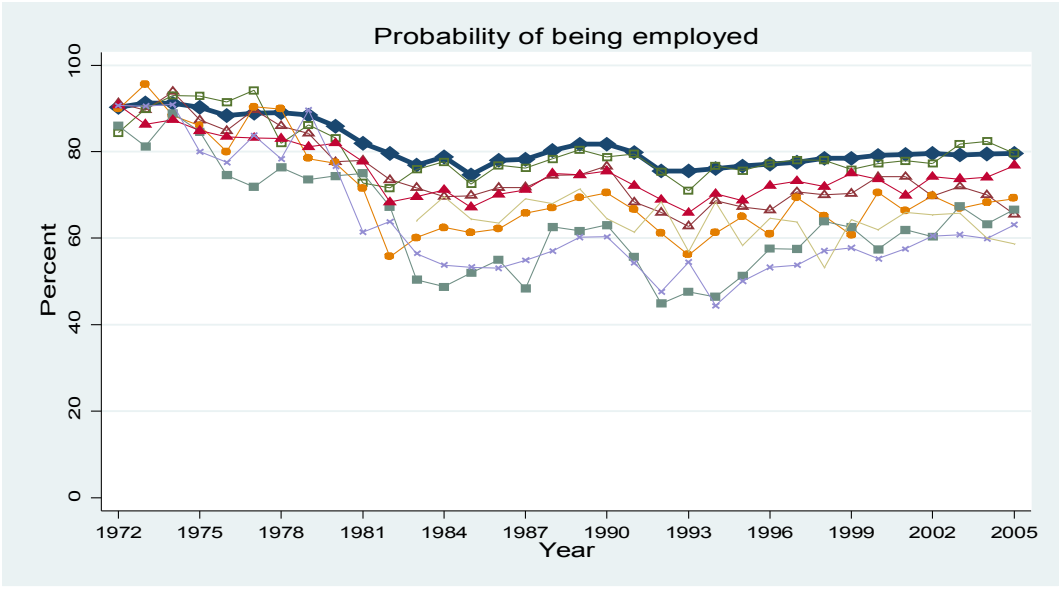


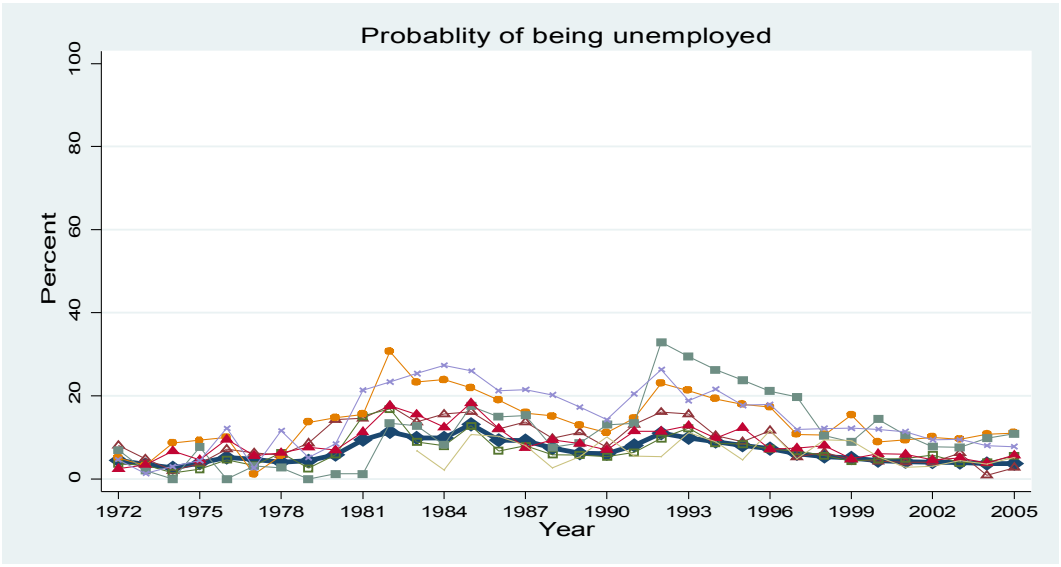


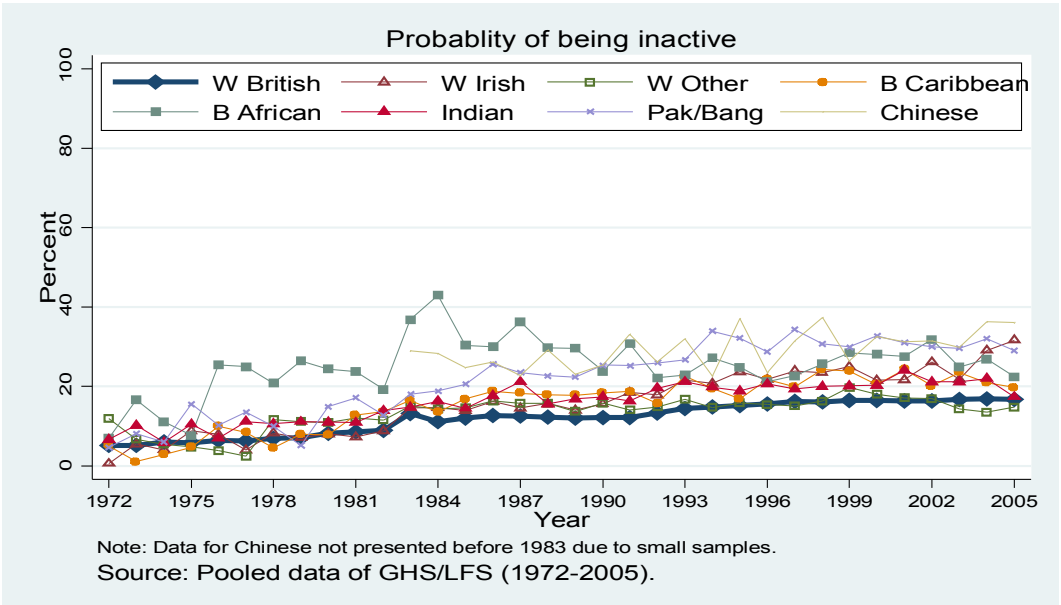


Note: Data for Chinese not presented before 1983 due to small samples.
Source: Pooled data of GHS/LFS (1972-2005).

Figure 1: Educational qualifications for men (16-64) in Britain.



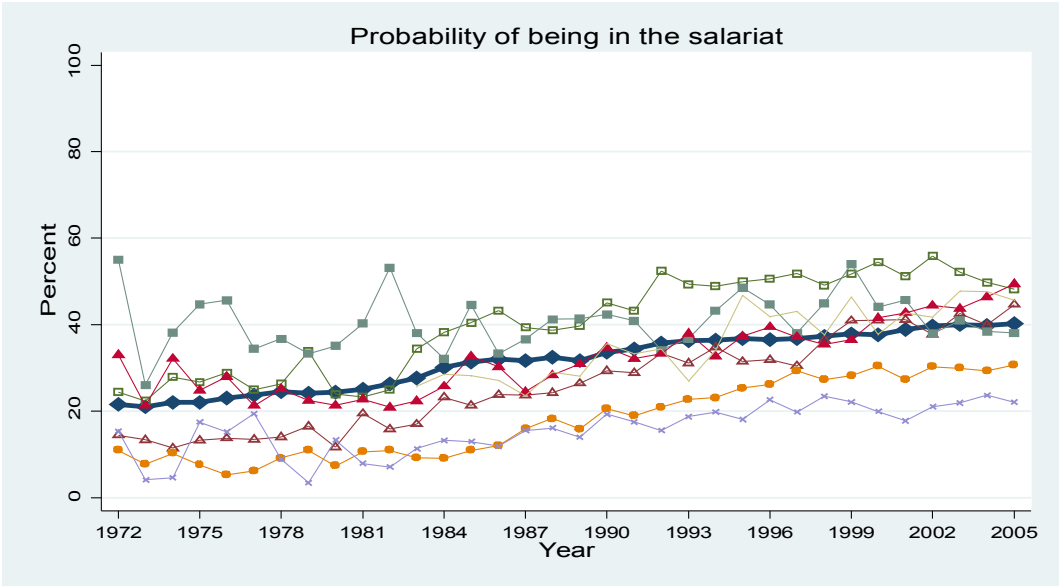


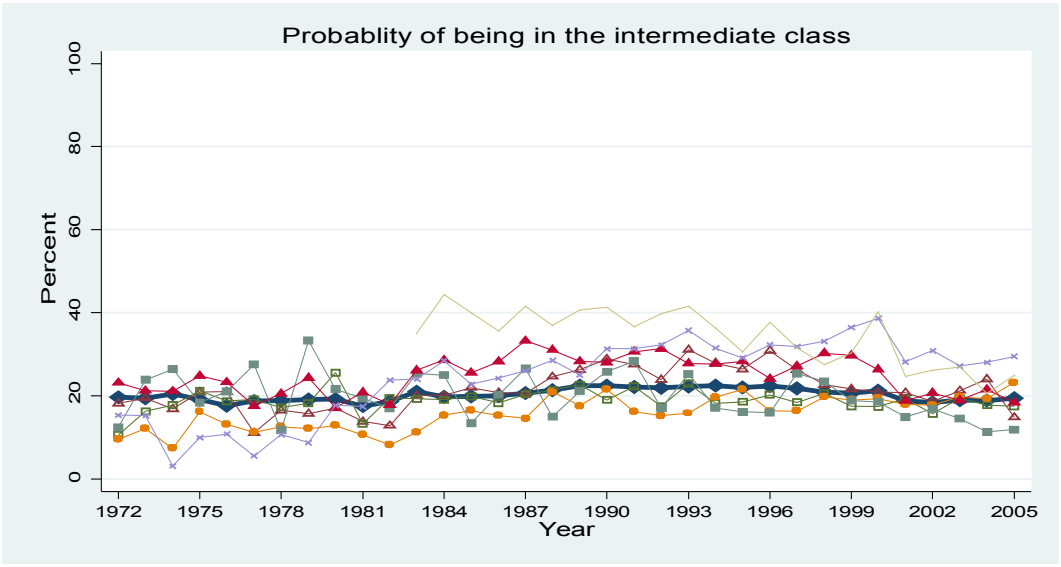


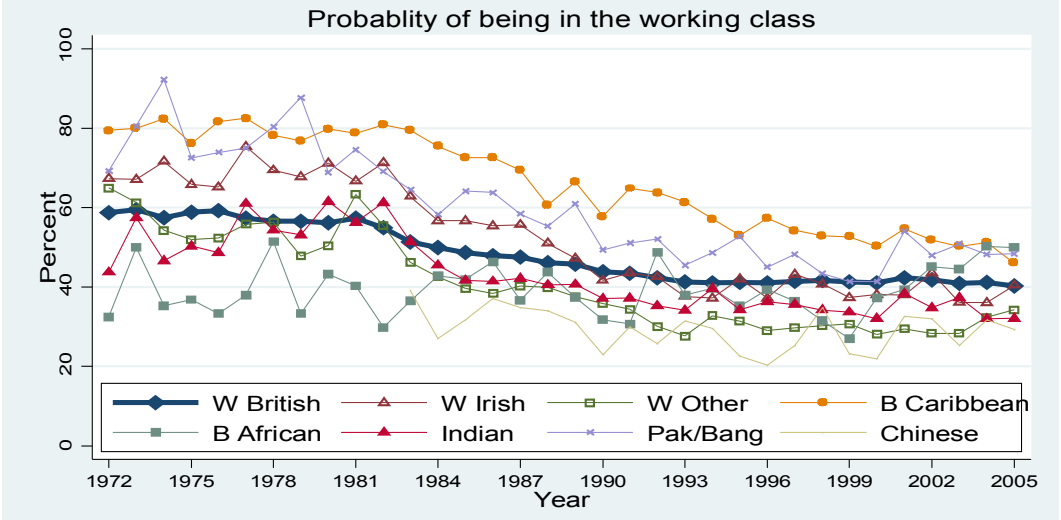
Note: Data for Chinese not presented before 1983 due to small samples.

Source: Pooled data of GHS/LFS (1972-2005).

Figure 2: Employment status for men (16-64) in Britain.



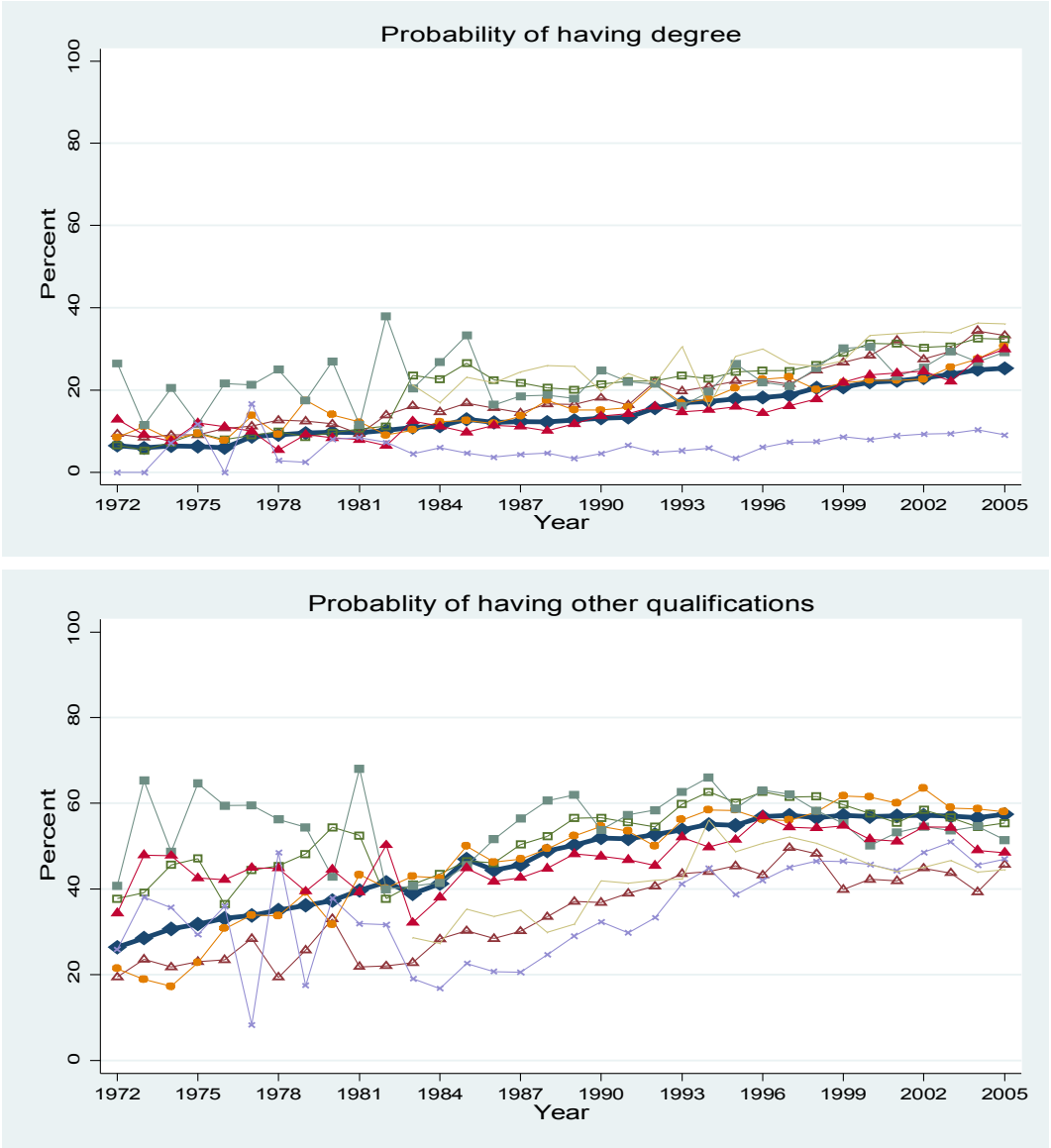




Note: Data for Chinese not presented before 1983 due to small samples.

Source: Pooled data of GHS/LFS (1972-2005).

Figure 3: Class position for men (16-64) in Britain.



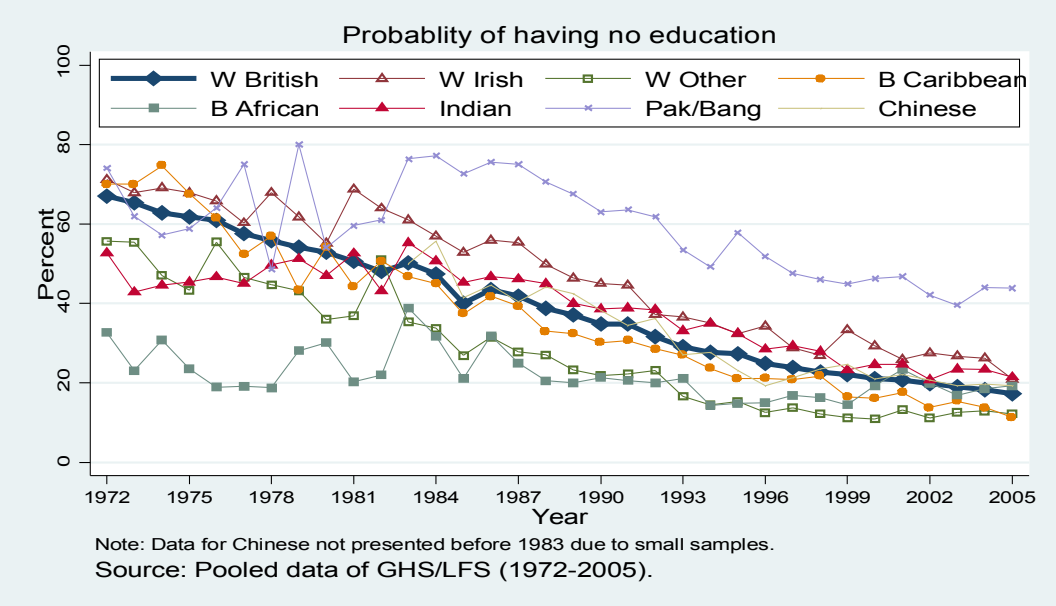
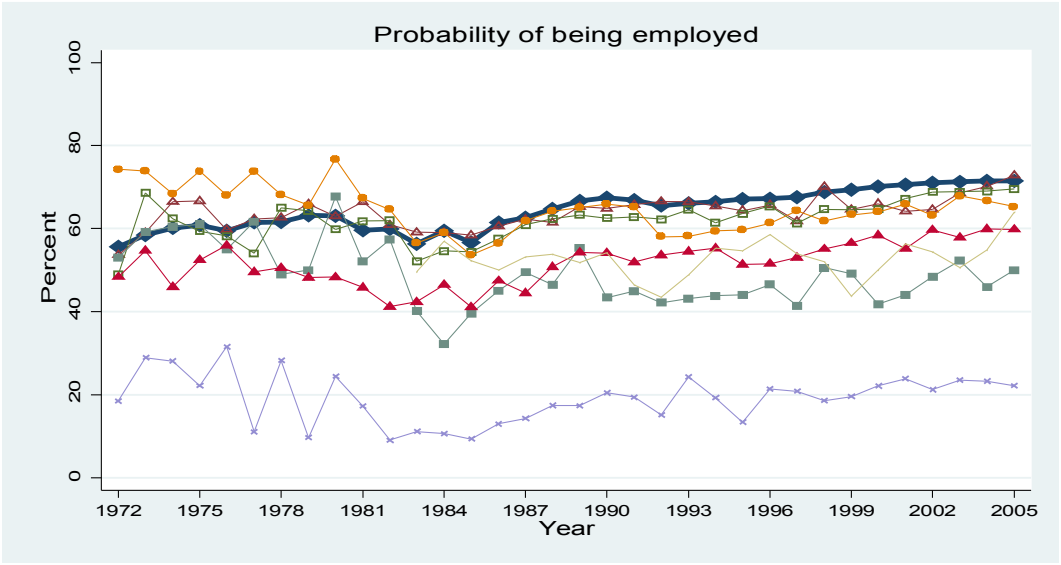
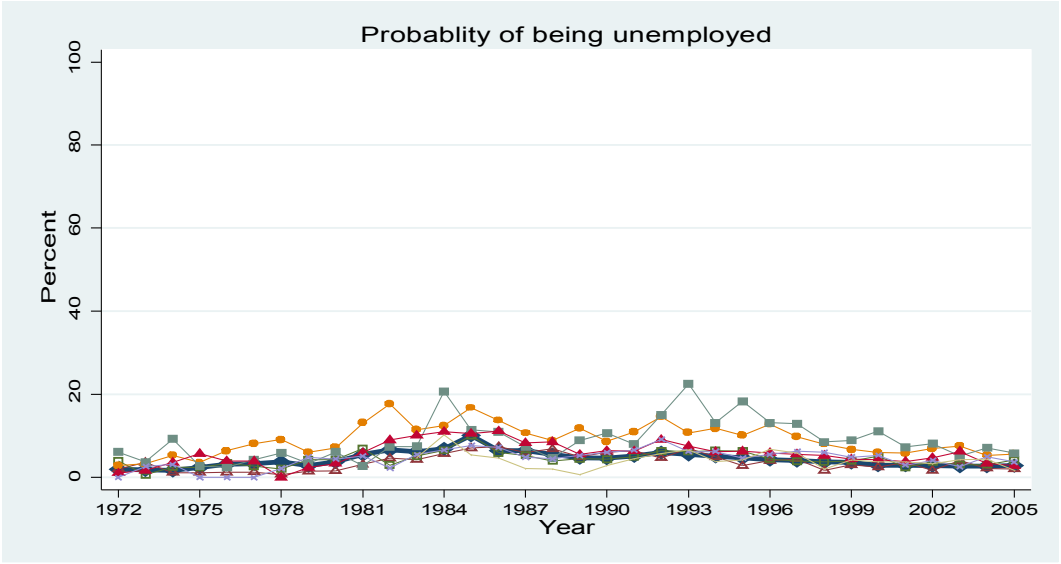
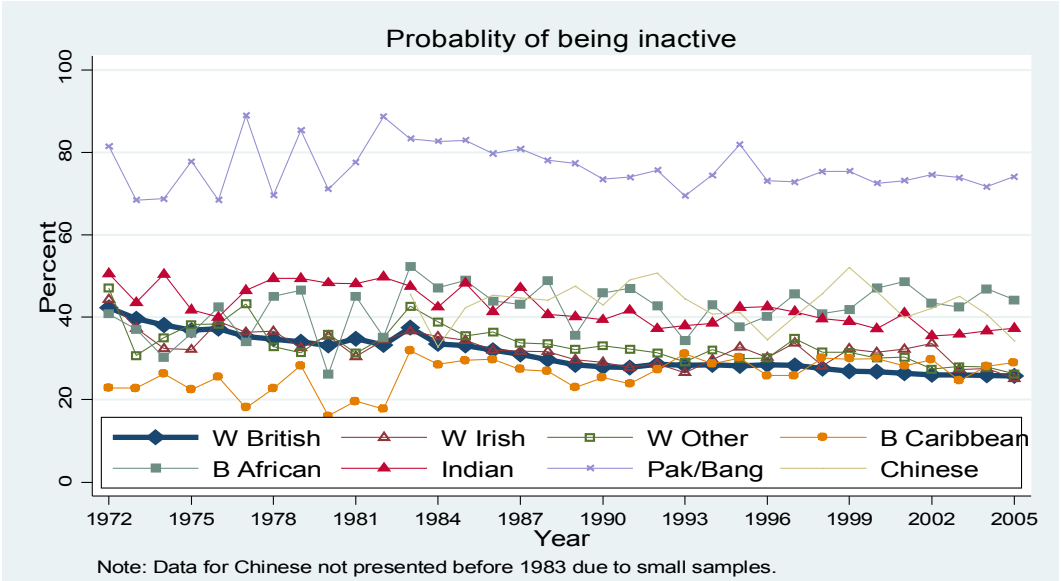


Figure 4: Educational qualifications for women (16-59) in Britain.







Note: Data for Chinese not presented before 1983 due to small samples.

Source: Pooled data of GHS/LFS (1972-2005).

Figure 5: Employment status for women (16-59) in Britain.

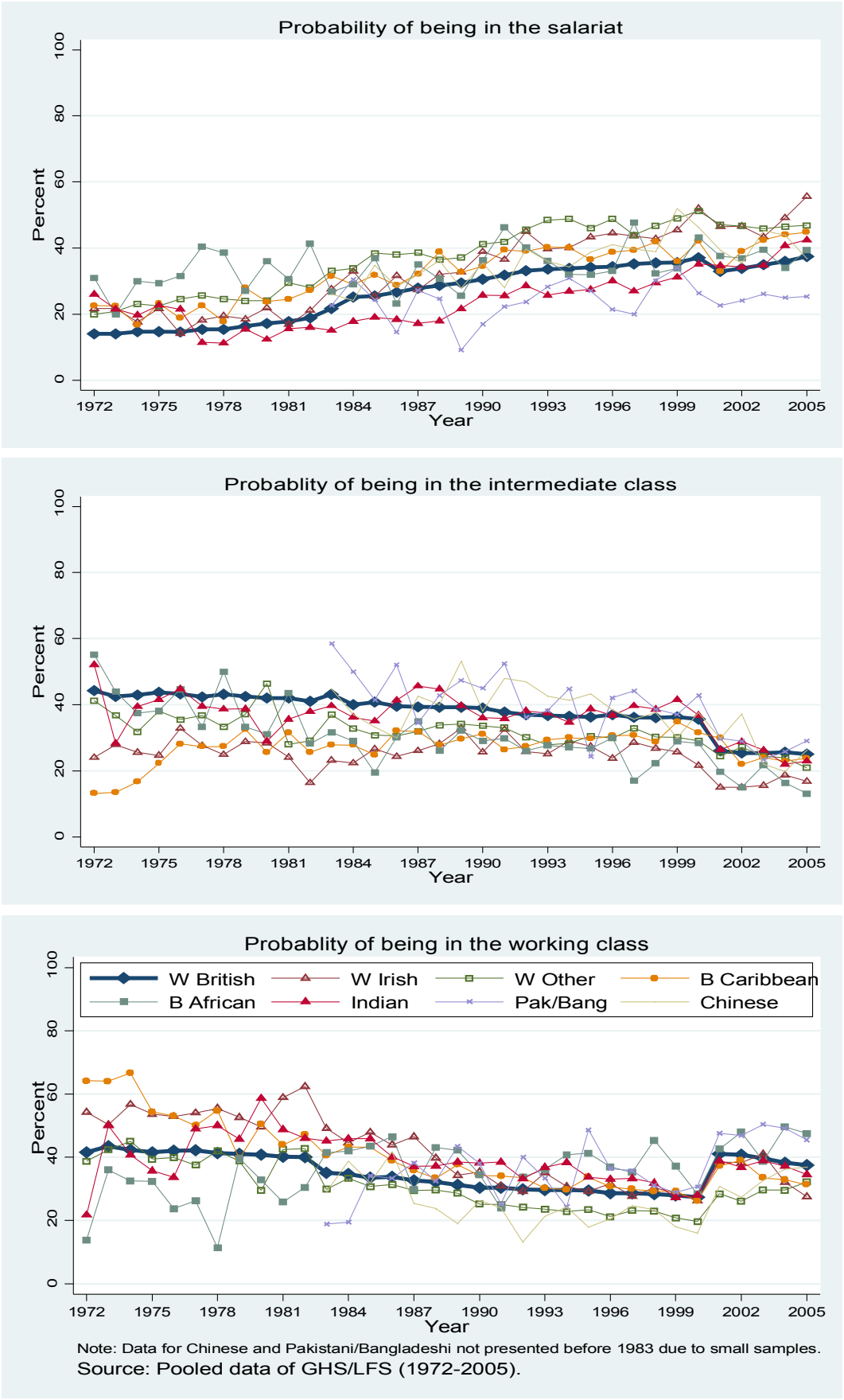


Figure 6: Class position for women (16-59) in Britain.

Table 1 Logistic regression coefficients of generation effects on access to the salariat: men aged 16-64

	White Irish	White Other	Black Caribbean	Black African	Indian	Pakistani/ Bangladeshi	Chinese
2nd Generation	-.095	-.326***	**.345*** **	.162	**.119***	**.394*** **	-.018
1.5th Generation	-.259***	-.409***	-.175	.099	-.117*	-.129	-.560***
1st Generation (ref)	0	0	0	0	0	0	0
Age							
Age (=age/10)	.913***	2.225***	2.066***	1.871***	1.517***	1.869***	2.077***
Age squared	-.119***	-.258***	-.258***	-.226***	-.172***	-.199***	-.246***
Marital Status							
Married (ref)	0	0	0	0	0	0	0
Separated/divorced/widowed	-.233*	-.389***	-.236	-.456**	-.013	-.345	-.261
Single	.142*	-.018	-.054	-.276**	.015	.067	-.518***
Education							
Degree+	3.814***	2.617***	3.976***	2.468***	3.254***	3.192***	3.227***
Professional quals below degree	2.866***	1.601***	2.671***	1.589***	2.109***	2.451***	2.281***
A Levels or equivalent	.792***	.382***	1.325***	.641***	1.102***	1.281***	1.209***
O Levels or equivalent	.955***	.279***	1.125***	.046	.652***	.734***	.568**
Primary or no qualification (ref)	0	0	0	0	0	0	0
Number of children under 16 in HH	-.083***	-.045**	-.059	-.041	-.173***	-149***	-.331***
Constant	-3.105***	-4.953***	-6.318***	-4.881***	-4.626***	-6.141	-5.184***
Pseudo R^2	.239	.185	.243	.200	.275	.262	.294
N	9,127	27,508	7,107	3,776	15,651	8,250	2,103

Source: The GHS/LFS (1972-2005).

Table 2 Logistic regression coefficients of generation effects on access to the salariat: women aged 16-59

	White Irish	White Other	Black Caribbean	Black African	Indian	Pakistani/ Bangladeshi	Chinese
2nd Generation	-.272***	-.221***	-.265**	-.021	**.401***	**.282***	-.066
1.5th Generation	-.249***	-.324***	-.195*	.119	**.277***	-.041	-.123
1st Generation (ref)	0	0	0	0	0	0	0
Age							
Age (=age/10)	1.476***	2.760***	2.348***	1.934***	2.284***	3.080***	2.556***
Age squared	-.214***	-.347***	-.286***	-.224***	-.273***	-.356***	-.283***
Marital Status							
Married (ref)	0	0	0	0	0	0	0
Separated/divorced/widowed	-.124	-.079	-.089	-.354**	-.062	-.131	-.120
Single	.015	.059	-.070	-.084	.179**	.322**	-.024
Education							
Degree+	3.097***	2.238***	3.234***	2.560***	3.162***	2.989***	3.930***
Professional quals below degree	3.179***	1.869***	3.043***	2.333***	2.794***	2.139***	2.574***
A Levels or equivalent	1.012***	.493***	1.276***	.787***	1.442***	1.417***	1.114***
O Levels or equivalent	.671***	.032	.858***	.289*	.785***	.775***	.653**
Primary or no qualification (ref)	0	0	0	0	0	0	0
Number of children under 16 in HH	-.299***	-.238***	-.121***	-.133***	-.174***	-115**	-.188**
Constant	-3.338***	-5.686***	-5.839***	-5.343***	-6.628***	-8.120***	-6.916***
Pseudo R^2	.273	.172	.247	.213	.258	.228	.263
N	8,842	26,774	8,313	3,410	11,664	3,234	2,031

Source: The GHS/LFS (1972-2005).

Table 3: Logit regression coefficients on employment

	Model 1	Model 2	Model 3	Model 4
Ethnicity				
White British (ref)	0	0	0	0
White Irish	-.383***	-.392***	-.408***	-.489***
White Other	.014	-.005	-.035	-.019
Black Caribbean	-.988***	-.945***	-.857***	-.492***
Black African	-.959***	-1.052***	-1.174***	.433
Indian	-.298***	-.333***	-.334***	-.325**
Pakistani/Bangladeshi	-1.109***	-1.187***	-.904***	-.079
Chinese	-.079	-.110	-.132	-.036
Other	-.589***	-.679***	-.626***	-.619***
Marital Status				
Married (ref)		0	0	0
Separated/divorced/widowed		-.695***	-.856***	-.856***
Single		-.485***	-.179***	-.180***
Number of children under 16 in HH		-.028***	-.066***	-.066***
Period				
Earlier (1972-1980) (ref)		0	0	0
Middle (1981-1996)		-.808***	-1.143***	-1.117***
Later (1997-2005)		-.267***	-.686***	-.672***
Country of birth				
UK born (ref)			0	0
Foreign born			.025	.017
Age				
Age (=age/10)			1.607***	1.609***
Age squared			-.173***	-.173***
Education				
Degree+			1.184***	1.184***
Professional below degree			1.175***	1.176***
A Levels or equivalent			.829***	.829***
O Levels or equivalent			.706***	.706***
Primary or no qualification (ref)			0	0
Interaction effects				
White Irish in middle period				.027
White Irish in later period				.391**
White Other in middle period				-.023
White Other in later period				.023
Black Caribbean in middle period				-.379**
Black Caribbean in later period				-.385**
Black African in middle period				-1.781***
Black African in later period				-1.512***
Indian in middle period				.001
Indian in later period				.052
Pakistani/Bangladeshi in middle period				-.901***
Pakistani/Bangladeshi in later period				-.735***
Chinese in middle period				-.044
Chinese in later period				-.167
Constant	2.438***	3.257***	-.226***	-.251***
Pseudo R^2	.006	.026	.078	.078
N	1,060,063	1,060,063	1,060,063	1,060,063

Note

1. For men aged 16-64 and resident in Great Britain. * p<0.05, ** p<0.01, *** p<0.001.

Source: Pooled data of GHS/LFS 1972-2005.

Table 4: Logit regression coefficients on access to the salariat

	Model 1	Model 2	Model 3	Model 4
Ethnicity				
White British (ref)	0	0	0	0
White Irish	-.237***	-.210***	-.031	-.364***
White Other	.516***	.485***	.525***	.246***
Black Caribbean	-.675***	-.649***	-.468***	-.929***
Black African	.241***	.261***	-.256***	.392***
Indian	.049**	.019	-.158***	.000
Pakistani/Bangladeshi	-.755***	-.844***	-.573***	-.723***
Chinese	.192***	.159***	-.036	.308
Other	.148***	.193***	.208***	.209***
Marital Status				
Married (ref)		0	0	0
Separated/divorced/widowed		-.247***	-.289***	-.289***
Single		-.279***	-.104***	-.104***
Number of children under 16 in HH		.029***	-.034***	-.033***
Period				
Earlier (1972-1980) (ref)		0	0	0
Middle (1981-1996)		.690***	.133***	.134***
Later (1997-2005)		.765***	-.036***	-.053***
Country of birth				
UK born (ref)			0	0
Foreign born			.045*	.044*
Age				
Age (=age/10)			1.841***	1.840***
Age squared			-.195***	-.195***
Education				
Degree+			3.811***	3.813***
Professional below degree			2.629***	2.631***
A Levels or equivalent			1.118***	1.119***
O Levels or equivalent			1.276***	1.278***
Primary or no qualification (ref)			0	0
Interaction effects				
White Irish in middle period				.291**
White Irish in later period				.546***
White Other in middle period				.145
White Other in later period				.499***
Black Caribbean in middle period				.369*
Black Caribbean in later period				.671***
Black African in middle period				-.706***
Black African in later period				-.750***
Indian in middle period				-.257**
Indian in later period				-.040
Pakistani/Bangladeshi in middle period				.134
Pakistani/Bangladeshi in later period				.183
Chinese in middle period				-.456
Chinese in later period				-.243
Constant	-.563***	-1.169***	-5.853***	-5.850***
Pseudo R^2	.003	.011	.244	.245
N	1,019,766	1,019,766	1,019,766	1,019,766

Note

1. For men aged 16-64 and resident in Great Britain. * p<0.05, ** p<0.01, *** p<0.001.

Source: Pooled data of GHS/LFS 1972-2005.

Table 5: Decomposing the unemployment gaps between minority and White groups

	% unemployed	% of the gap explained by the models				% of gap resid.
		M1	M2	M3	M4	
W B	*3.7*					
B C	10.9***	2.2	3.8	9.9	18.0	66.1
B A	11.4***	1.9	5.5	5.9	15.0	71.3
Indn	8.0***	4.6	7.2	6.2	-	82.0
P/B	11.4***	20.3	8.2	3.9	0.8	66.8
Chns	6.9*	18.4	4.6	15.3	6.9	54.8

Note:

1. Unemployment rate for each ethnic group is compared with White British, with *p<0.05; **p<0.01 and *** p<0.001.
2. Model 1 = human capital (education, age, age squared); Model 2 = M1 + social capital (friends in same ethnicity, BME interaction); Model 3 = M2 + job refusal; Model 4 = M3 + personal/contextual characteristics (gender, marital status, number of dependant children and region.
3. For men aged 16-64 and women aged 16-59 in England and Wales.

Source: The HOCS (2003/05).

Table 6 Age, period and cohort (mean age rounded)

	Men			Women		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
Born 40-9, 1st g arrival bf 1971	**31**	**44**	**56**	**31**	**44**	**55**
(N)	20,274	167,430	68,327	20,885	170,941	57,497
Born 50-9, 1st g arrival 1972-80	**22**	**34**	**46**	**22**	**34**	**46**
(N)	17,468	166,680	69,944	17,329	173,325	73,147
Born 60-9, 1st g arrival 1981-96	**17**	**25**	**36**	**17**	**25**	**36**
(N)	3,512	178,709	80,288	3,397	186,854	88,066
Born 70-9, 1st g arrival 1997-05	-	**19**	**27**	-	**19**	**27**
(N)	-	65,522	46,037	-	65,795	48,350

Notes:

Age (life cycle) effect (same cohort, different periods or time of survey)
Cohort effect (different age, different cohort, same period);
Period effect (same age, different cohort, different period).

Source: The GHS/LFS (1972-2005).

Table 7 Unemployed rates (%) by cohort, ethnicity, generation, sex and period

	Men			Women		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
Born 40-9, 1st g arrival bf 1971						
White British (ref)	3.9	7.1	4.0	4.4	5.9	2.8
1st generation BME	3.6	13.4***	10.3***	4.8	9.8***	6.6***
2nd generation BME	3.9	13.7***	6.9**	3.8	10.7***	6.1**
Born 50-9, 1st g arrival 1972-80						
White British (ref)	6.7	8.9	3.6	6.5	8.4	2.8
1st generation BME	12.2†	13.4***	5.4**	10.3	11.1***	5.2***
2nd generation BME	7.6	16.3***	7.9***	9.7***	13.1***	6.8***
Born 60-9, 1st g arrival 1981-96						
White British (ref)	13.2	14.0	3.9	12.8	11.5	3.6
1st generation BME	-	25.0***	9.9***	-	22.8***	10.4***
2nd generation BME	12.9	22.4***	7.5***	9.4	19.8***	6.5***
Born 70-9, 1st g arrival 1997-05						
White British (ref)	-	17.5	6.8	-	12.7	5.2
1st generation BME	-	-	10.5***	-	-	11.6***
2nd generation BME	-	31.9***	12.7***	-	25.5***	11.4***

Notes

1. For men aged 16-64 and women aged 16-59, resident in Great Britain and active in the labour market. Data not shown for marginal distributions (N<=30).
2. BME refers to black and minority ethnic groups, including people of mixed origins but excluding White Irish and White Others. 2nd generation refers to those born in the UK or arriving by the age of 16. Arrival time refers to 1st generation.
3. Significance tests are conducted for BMEs with White British as the reference group. †p<0.10, *p<0.05, ** p<0.01 and *** p<0.001.

Source: The GHS/LFS (1972-2005).

Table 8 Access to salariat (%) by cohort, ethnicity, generation, sex and period

	Men			Women		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
Born 40-9, 1st g arrival bf 1971						
White British (ref)	27.8	39.9	39.7	20.1	30.9	32.5
1st generation BME	24.9	29.8***	33.8**	31.5***	34.1**	38.7**
2nd generation BME	31.4*	29.4***	32.6*	31.7***	37.5***	42.5**
Born 50-9, 1st g arrival 1972-80						
White British (ref)	17.0	38.1	45.3	18.1	35.7	39.5
1st generation BME	29.2**	32.1***	38.8***	16.1	29.9***	33.7***
2nd generation BME	15.4	32.8***	42.4	18.0	35.5	45.6*
Born 60-9, 1st g arrival 1981-96						
White British (ref)	4.3	26.8	43.3	5.3	31.7	40.5
1st generation BME	-	32.3***	35.5***	-	24.3***	33.4***
2nd generation BME	7.4*	26.1	44.8	5.7	30.5	48.2***
Born 70-9, 1st g arrival 1997-05						
White British (ref)	-	14.4	37.2	-	17.4	41.0
1st generation BME	-	-	35.5	-	-	46.2**
2nd generation BME	-	19.5***	44.3***	-	16.1	46.5***

Notes

1. Salariat refers to respondents in professional or managerial positions who were working at the time of interview.

Appendix 2: Additional data

Appendix 2 Table 1
Ethnic distribution (%) in the BES and BSAS

	White	B Afr	B Car	Indian	Pakistani/ Bangladeshi	Chinese	Other	N
BES								
1974	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1979	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1983	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1987	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
1992	97.1	1.2		1.0	0.4	0.2	0.2	3,470
1997	96.3	0.2	0.5	1.1	0.6	0.1	1.2	3,605
2001	95.8	0.6	0.5	0.8	0.7	0.1	1.5	3,034
2005	95.2	0.4	0.4	0.6	0.8	0.2	2.5	4,779
BSAS								
1983-91	96.8	1.3		1.1	0.6	0.1	0.2	7,273
1990	96.6	1.1		1.2	0.7	0.1	0.2	2,788
1991	96.2	1.4		1.4	0.7	0.1	0.2	1,463
1993	95.3	1.8		1.4	0.5	0.1	0.8	2,934
1994	94.9	2.0		1.3	0.5	0.2	1.0	3,460
1995	95.5	1.6		1.0	0.8	0.1	1.0	3,627
1996	95.3	0.4	1.1	1.1	0.8	0.2	1.1	3,607
1997	94.1	0.9	1.1	0.9	1.5	0.3	1.3	1,349
1998	94.7	0.9	1.3	1.0	0.4	0.1	1.5	3,107
1999	95.5	0.7	0.8	0.9	0.7	0.1	1.3	3,108
2000	93.9	0.6	1.3	1.2	0.9	0.3	1.9	3,413
2001	94.2	0.6	1.4	1.1	0.6	0.2	1.9	3,261
2002	92.9	0.9	1.7	1.1	1.3	0.3	2.0	3,415
2003	92.5	1.3	1.4	1.5	1.1	0.3	2.0	4,405
2004	94.6	0.8	0.9	1.1	0.6	0.3	1.7	3,192

Source: the BES/BSAS.

Appendix 2 Table 2
Ethnic distribution (%) in the GHS/LFS (1972-2005)

	White	Black African	Black Caribbean	Indian	Pakistani/ Bangladeshi	Chinese	Other	N
1972	90.7	.4	.3	.7	.2	.1	7.7	36,718
1973	90.2	.5	.2	.8	.3	.1	7.9	36,532
1974	90.7	.5	.2	.8	.3	.1	7.4	33,879
1975	90.6	.6	.2	.9	.2	.1	7.5	36,845
1976	89.6	.5	.3	.9	.2	.1	8.4	36,709
1977	89.8	.6	.4	.9	.2	.1	8.0	32,446
1978	88.9	.6	.4	1.3	.3	.0	8.5	32,045
1979	88.8	1.2	.7	1.8	.7	.0	6.9	33,705
1980	90.4	1.2	.8	2.0	.7	.0	4.9	31,443
1981	90.5	1.1	.8	2.3	.8	.0	4.4	32,410
1982	90.7	1.0	.7	2.4	.8	.0	4.5	27,160
1983	95.7	.9	.2	1.5	.8	.2	.9	230836
1984	95.8	.9	.2	1.4	.9	.2	.7	176,501
1985	95.8	.9	.2	1.2	.9	.2	.8	181,154
1986	95.6	.9	.2	1.4	.9	.2	1.0	182,074
1987	95.4	.9	.2	1.4	.9	.2	1.0	179,601
1988	95.2	.8	.2	1.4	1.0	.2	1.2	181,044
1989	95.3	.9	.3	1.4	1.0	.2	.9	180,745
1990	95.3	.8	.2	1.3	1.0	.2	1.1	175,198
1991	94.5	.7	.3	1.5	1.2	.2	1.2	174,002
1992	94.4	.8	.4	1.6	1.3	.3	1.2	177,342
1993	94.4	.9	.4	1.6	1.3	.3	1.3	265,673
1994	94.3	.8	.4	1.6	1.3	.3	1.3	259,264
1995	94.4	.8	.4	1.5	1.3	.2	1.4	258,258
1996	94.3	.8	.5	1.5	1.4	.2	1.5	260,002
1997	93.8	.8	.6	1.6	1.4	.3	1.6	119,939
1998	93.4	.8	.6	1.7	1.6	.3	1.7	138,650
1999	93.3	.8	.6	1.7	1.7	.2	1.8	116,474
2000	93.0	.9	.7	1.6	1.7	.3	1.9	130,734
2001	92.3	1.0	.9	1.7	1.8	.3	2.0	133,613
2002	91.9	.9	.9	1.8	1.9	.4	2.3	129,689
2003	91.6	.9	1.0	1.8	2.0	.3	2.4	131,326
2004	91.3	.9	1.1	1.7	2.1	.4	2.4	124,049
2005	90.7	.9	1.1	2.0	2.1	.4	2.8	103,808
All	93.9	.8	.4	1.5	1.2	24	1.9	4,376,86

Source: the GHS/LFS.

Appendix 2 Table 3
A Comparison between the GHS/LFS and SARs in 1991 and 2001 (for men aged 16-64 and women aged 16-59 resident in England and Wales)

	1991		2001	
	GHS/LFS	SARs	GHS/LFS	SARs
Sex				
Male	51.4	51.7	50.6	51.5
Female	48.6	48.3	49.4	48.5
Ethnicity				
White	94.5	93.9	91.5	91.1
Black Caribbean	0.9	1.2	1.2	1.2
Black African	0.3	0.4	1.0	1.0
Indian	1.7	1.9	2.1	2.2
Pakistani/Bangladeshi	1.1	1.1	1.9	1.9
Chinese	0.3	0.3	0.4	0.5
Other	1.2	1.2	2.0	2.2
Employment status				
Working	72.6	69.1	73.5	71.9
Unemployed	6.9	8.3	2.7	4.2
Non-employed	20.7	22.6	22.7	23.9
Class				
Salariat	33.7	29.8	36.2	38.5
Routine non-manual	19.1	22.4	13.3	13.1
Petty bourgeoisie	10.4	9.0	9.1	9.6
Skilled manual	16.4	15.9	27.8	16.3
Semi-unskilled manual	20.3	22.9	13.7	12.6
Mean hours of work per week	35.7	36.3	36.8	37.5
N	93,561	560,650	74,444	1,003,205

Employment status of 1st and 2nd generation minority ethnic groups in Britain (1972-2005) (for ESRC's Britain Today)

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Britain is becoming increasingly multi-ethnic, with the proportion of minority ethnic groups growing from 3 per cent in 1951 to 8 per cent in 2001. The presence and the continued growth of the minority ethnic population have attracted serious attention from both academia and government. This is because the socio-economic conditions of the minority ethnic groups and their integration into the wider society affect not only their own well-being, but the future prosperity of the country as a whole.

Studies of ethnic disadvantages date back forty years ago, but systematic research did not emerge until the 1990s with the release of the 1991 Census, which prompted a huge research programme on ethnic relations. Yet a closer look reveals that nearly all that research showed some snap-shot pictures only. No research explored the patterns and trends of the economic fortunes of the minority ethnic groups during the period in which the vast majority came to settle in the country, let alone any research on the experiences of the first and the second generations within the groups. This paper aims to fill in the gap.

Pooling together all the data from the General Household Survey and the Labour Force Survey where detailed information on ethnicity is available, we analyse the labour market situations of the minority ethnic groups in each of the 34 years from 1972 to 2005. We differentiate nine groups: White British, White Irish, White Other,

Black Caribbean, Black African, Indian, Pakistani/Bangladeshi, Chinese and Other. Pakistanis and Bangladeshis are grouped together as much research shows that they share similar experiences in a variety of socio-economic situations. The 'Other' group comprises people of mixed origins and from various other locations. The sample sizes for the Pakistani/Bangladeshi and Chinese groups are relatively small before 1983 and are dropped from the analysis on employment status.

The minority ethnic groups came at different times (Panel 1 of Figure 1). Around three quarters of White Irish came before 1971, as did half of White Other, one third of Black Caribbean and a quarter of Indian, groups. Nearly sixty per cent of Black Caribbeans and just over one half of Pakistanis/Bangladeshis were born in Britain, so were some forty per cent of Black Africans and Indians, and nearly thirty per cent of the Chinese.

People of minority ethnic groups also came at different ages, which can be expected to have a substantial impact on their labour market experiences. For instance, people coming at a young age attend schools in Britain and have similar social and cultural capital to that possessed by their co-ethnics born here or indeed to that by the White British. In view of this, we group people born in Britain or coming here by the age of 16 as second generation and those coming after 17 as first generation.

The data (in Panel 2 of Figure 1) show that nearly 80 per cent of the Other, over 70 per cent of Black Caribbean and Pakistani/Bangladeshi, around 60 per cent of Indian and Black African, and just over 50 per cent of White Other and Chinese groups can be viewed as second-generation in this sense whereas the White Irish are the least likely to be second-generation, at less than 40 per cent.

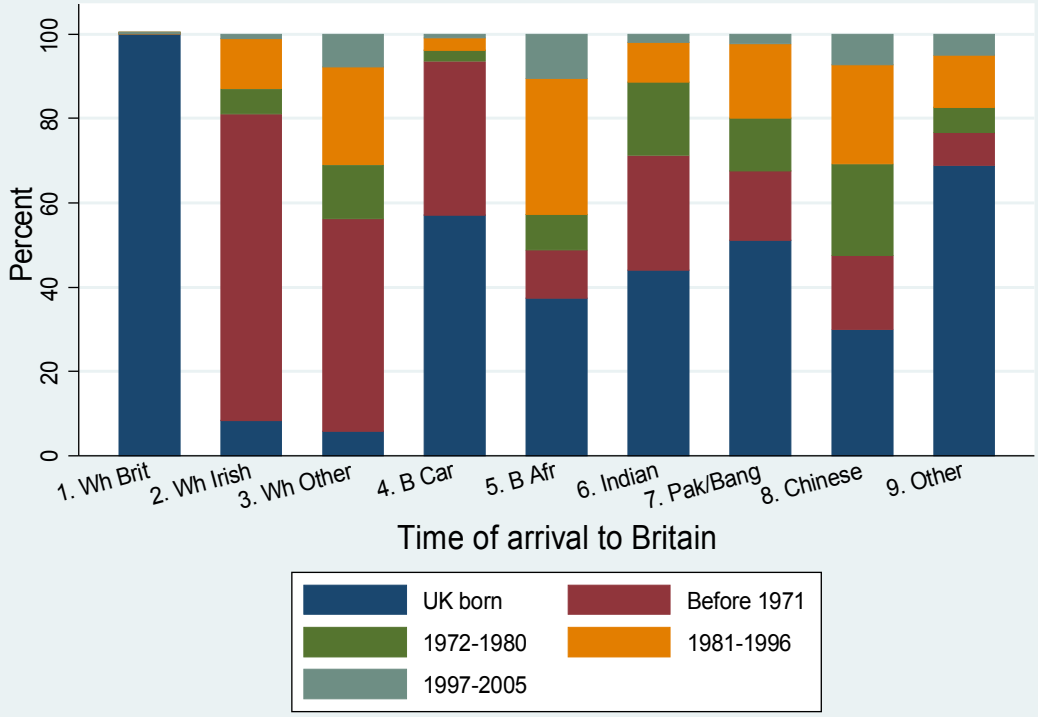
We now have a brief look at the employment status of the minority ethnic groups. We confine our analysis to men aged 16 to 64 and women aged 16 to 59. We first look at the employment situation by the second and the first generations (Panels 1 and 2 in Figure 2) and then at unemployment (Panels 3 and 4). Note that the scales of the

panels are different. In each of the panels, we also present information on the White British as the reference group.

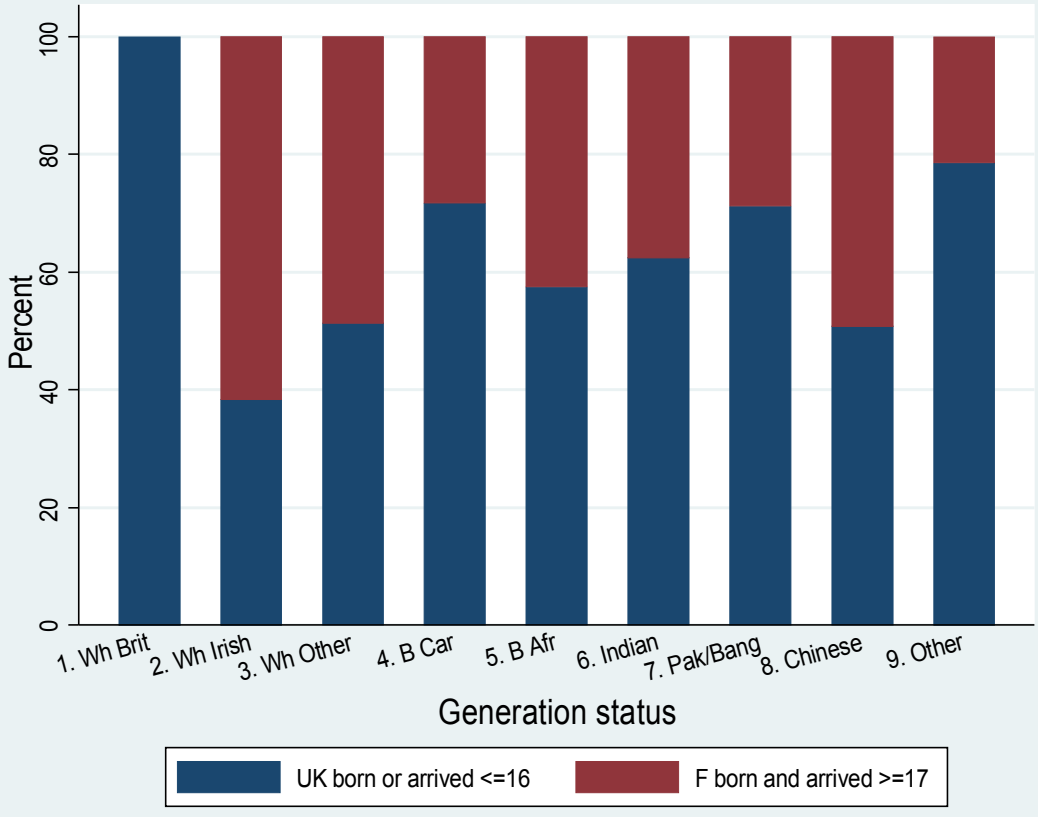
It is clear that the British Whites are generally most likely to be employed and least likely to be unemployed. Also noteworthy is the fact that there are much greater differences amongst the minority ethnic groups than between them and the White British. A third feature that emerged is that the differences became more prominent from the early 1980s onwards. With regard to the employment situation of the second generation, it is the Black African and Pakistani/Bangladeshi groups in particular who were least likely to be found in the labour market in each year of the last two decades. It might be said that many of the people from those groups were young and did not have sufficient experience to gain access to the labour market. Yet members of their first generation, particularly those of Pakistani/Bangladeshi origins, were only half as likely as the White British to find themselves in gainful employment. Further analysis shows that Pakistani/Bangladeshi men had a similar employment profile to that of the Black African men but their women were only around 20 per cent engaged in the labour market throughout the period covered. With regard to unemployment, we find two peaks: in the mid 1980s and in the early 1990s. During those 'peak' times, it is the second-generation Black and Pakistani/Bangladeshi groups who bore the brunt, so did the first generation of Black Africans in the early 1990s.

Our analysis thus shows that the Government and the wider society need to do more to help the Black and the Pakistani/Bangladeshi groups, especially women in the latter group, to gain access to the labour market.

Figure 1 Time of arrival and generation status

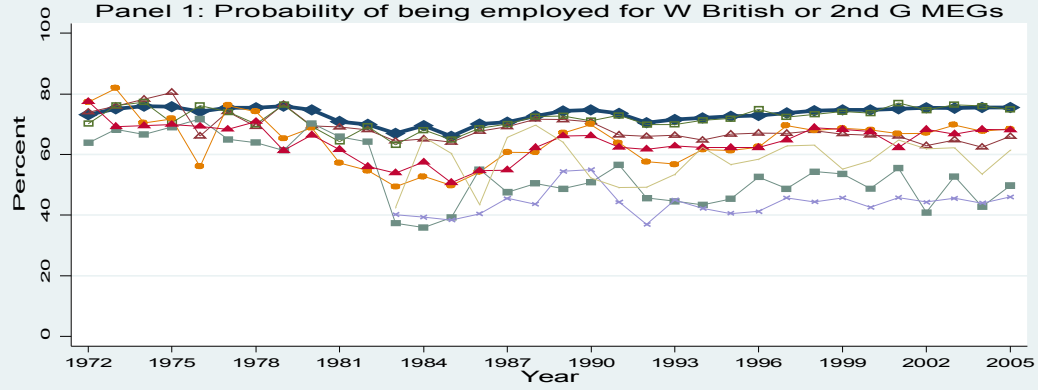


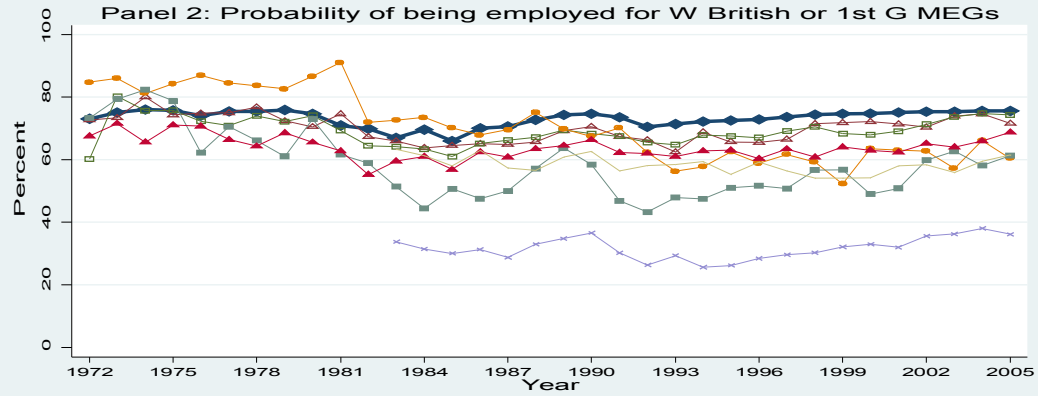
Source: Pooled data of GHS/LFS(1972-2005).

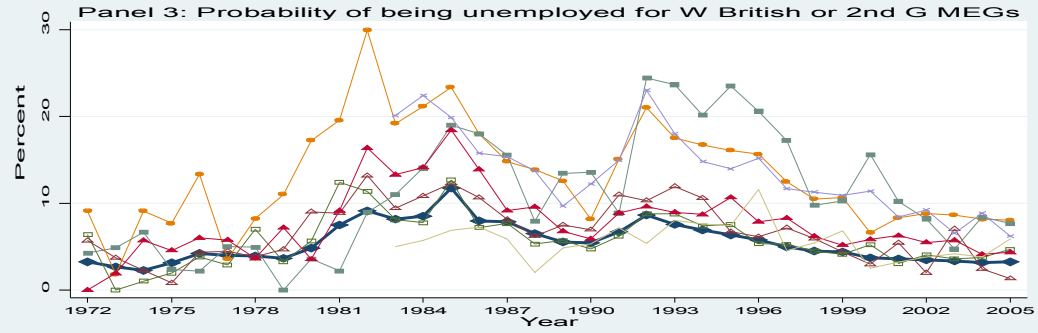


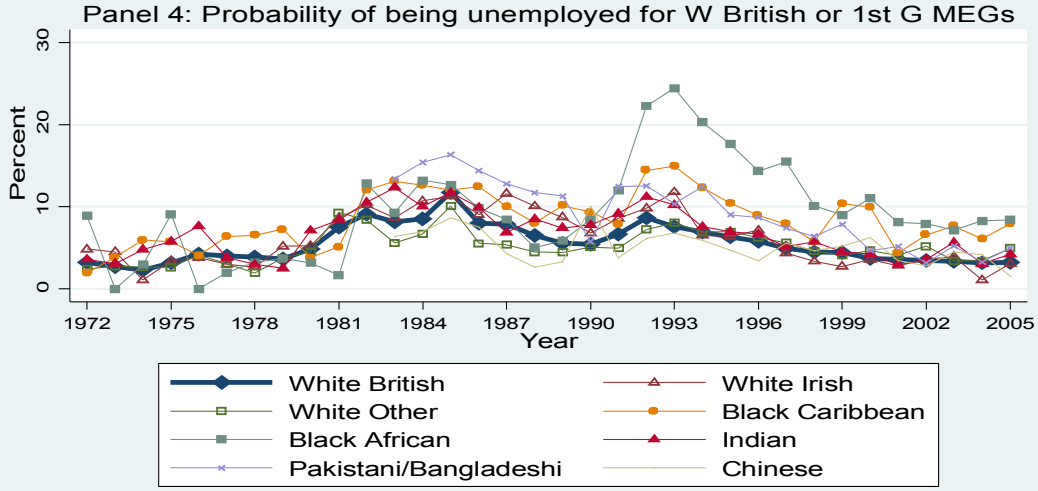
Source: Pooled data of GHS/LFS(1972-2005).

Figure 2 Employment status of ethnic groups in Britain









Note: Men aged 16-64&women aged 16-59. Pakistani/Bangladeshi&Chinese dropped before 1983.

Source: Pooled data of GHS/LFS(1972-2005).

Minority ethnic men in British labour market (1972-2005)

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(Forthcoming in IJSSP)

Abstract

Purpose: This paper investigates ethnic disadvantages in the British labour market in the last three decades.

Methodology: Drawing data from the most authoritative government surveys, we analyse the gross and the net differences in employment status and class position between minority ethnic and White British men covering 34 years (1972-2005).

Findings: White British and White Other men were generally advantaged in employment and in access to professional and managerial (salariat) jobs. White Irish men were making steady progress, and have now caught up with the White British. Black men were much more likely to be unemployed in recession years but progress is discernible with Black Caribbeans approaching, and Black Africans frequently outperforming, the White British in gaining access to the salariat. Indian and Chinese men were behind the White British in employment but little different in access to the salariat. Pakistani/Bangladeshi men were most disadvantaged in both respects.

Originality of the paper: This is the most systematic research in this area using the most authoritative data and covering such a long period.

Paper classification: Research paper

Keywords: Employment Status; Class Position; Human Capital; Ethnic Penalty

Introduction

In this paper we conduct a systematic analysis of the labour market trajectories of men in different ethnic groups in Britain over the last three decades (1972-2005) using the most authoritative government datasets from the General Household Survey (GHS) and the Labour Force Survey (LFS).[1] The analysis focuses on patterns and trends on employment status and class position. We pay particular attention to the role of education on employment and occupational attainment. The overall aim is to show how the different ethnic groups were faring in the British labour market in the last three decades and, in so doing, to place the debate on ethnic socio-economic integration on a firmer empirical basis.

Theoretical context

Britain is becoming increasingly multi-ethnic, with the proportion of minority ethnic groups growing from 2.1 per cent in 1951 to 8.0 per cent in 2001. The presence and the continued growth of the minority ethnic population have attracted serious attention from academia and government organisations. This is because the socio-economic position of the minority ethnic groups affects not only their own well-being, but the future status of the country as a major player in an ever-increasing globalised world. Furthermore, as the White British population has an ageing structure, improving the socio-economic conditions of the minority ethnic groups through employment and upward social mobility is not only an issue of social justice and civic liberty, it is concerned with the future economic prosperity of all members in the society.

Studies of racial discrimination abound, dating back nearly forty years (Daniel, 1968). Yet research on ethnic disadvantages using quantitative data did not come until the 1990s. The release of the 1991 Census, particularly the Samples of Anonymised Records (SARs) from the Census, prompted a huge research programme on ethnic relations by academic and government researchers. Nearly 400 papers and monographs using the SARs were published by leading social scientists (Karn, 1997; Li, 2004). Since then, ethnic data have been available in all large-scale government

[1] We are grateful to the ESRC for funding this research (*Socio-economic position and political support of the BMEs in Britain (1971-2004)*, ESRC (RES-163-25-0003)) and for the UK Data Archive for making data accessible to us.

and academic surveys, and research using more recent data has continued unabated (Heath and Yu, 2003; Brook, 2005; Li, 2005). Yet little systematic research has been conducted on the patterns and trends of the economic fortunes of the minority ethnic groups covering the period during which the great majority of ethnic minority groups came to settle in the country.

There are ongoing debates on the nature and the extent of ethnic discrimination and disadvantage. Existing research using the 1991 Census and more recent data shows considerable differences both between the minority ethnic groups and the Whites, and among the minority ethnic groups themselves, in a whole range of areas such as education, employment, occupation, housing, health and social deprivation (Drew et al, 1997; Li, 2006a). The most serious disadvantages are faced by Black-Caribbeans, Black Africans, Pakistanis and Bangladeshis. Even members of minority ethnic groups that are generally perceived as 'doing well' are found to fall behind Whites in socio-economic attainment when personal attributes and educational qualifications are taken into account (Carmichael and Woods, 2000). On the other hand, there are signs of growing social integration by certain ethnic groups as shown in the increasing rates of intermarriage, especially between some Black groups and Whites (Dale et al, 2000).

We focus on the role of education on labour market attainment. Here we find some powerful theoretical grounds for believing that the minority ethnic groups will have more favourable outcomes in the labour market as the time goes on. First of all, new immigrants will often lack the kinds and levels of skills (human capital) that are relevant in the country of destination. Labour migrants in particular will often have relatively low levels of education and other forms of human capital and, on this account alone, would be expected to fill low-level jobs or to be engaged in small businesses. Minority ethnic groups are sometimes forced to be in self-employment as an 'escape strategy' when confronted with covert or overt discrimination in the mainstream labour market (Clark and Drinkwater, 1998). This is particularly so as reflected in the 'hyper-cyclical' nature of unemployment, that is, at times of economic recession, the unemployment rates of minority ethnic groups are disproportionately high. Secondly, immigrants will tend to experience what might be called an

'immigration penalty': the qualifications that they obtained at home are often regarded by employers as having less relevance or value on the British labour market; their experience in the home labour market are not easily transferable to the British labour market; they may lack fluency in English; and their social networks may have been disrupted by the very act of migration. Third, migrants, perhaps especially those from culturally dissimilar backgrounds, or those that are particularly 'visible', may experience discrimination either in the labour market directly, or in housing or other areas of life that may impact indirectly on their labour market opportunities (Heath and Li, 2007).

As time goes on, many of the disadvantages faced by earlier cohorts of minority ethnic groups are expected to be gradually reduced: the anti-discrimination acts may begin to take effect and in addition, following the 'contact' hypothesis (Hamberger and Hewstone, 1997) prejudice against ethnic minorities may decline as the majority population have had more contact with minorities. The minority groups themselves will have a better command of the English language and more experience of the British labour market as an increasing proportion of them will be second or third generation who, born and educated in Britain, can be expected to have similar human and social capital to that possessed by their White counterparts. The central concern of this paper, therefore, is to see whether this optimistic hypothesis of narrowing gaps over time between majority and minority populations is confirmed by rigorous investigation.

Data and analysis

In order to conduct the study, a large number of data sets are used from the GHS (1972-2005) and the LFS (1983 -2005). They are government surveys well known to the academic users. The GHS is an annual survey (with the exception of 1997/1998 and 1999/2000), as is the LFS from 1983 to 1991.[2] From 1992 onwards, the LFS became a quarterly panel survey with a rotating structure. The annual data from 1983 to 1991 and Wave 1 data of each season in each year from 1992 onwards are selected and pooled with the GHS, as Wave 1 data have face-to-face interviews with a much

[2] The LFS is available from 1973 onwards, but there is insufficient information on minority ethnic groups prior to 1983.

higher response rate than that in Waves 2-5. The pooled data has nearly five million records with around forty-seven thousand cases for minority ethnic groups: the largest and most authoritative dataset ever assembled for this kind of research. In this paper, we confine the analysis to men aged 16-64 and resident in Great Britain at the time of interview, with a sample size of over 1.5 million records. In the following, we shall first look at the overall patterns and trends in employment status and class, and then investigate the net effects (or ethnic penalties) after controlling for measures of human capital.

"Take in Figure 1"

The data in Figure 1 shows the patterns and trends of employment status in the 34 years covered. As discussed earlier, a great deal of research has been conducted on the employment situation of ethnic groups, but most of the research focused on one or two time points and only a few analyses covered a longer time period (Heath and Cheung, 2007; Iganski and Payne, 1999; Berthoud and Blekesaune, 2006). Here we provide the first evidence based on the most authoritative data covering 34 years. The figure has three panels: employed, unemployed and economically inactive. In each panel, we provide information on eight main groups in each year.[3] The eight groups are: White British, White Irish, White Other, Black Caribbean, Black African, Indian, Pakistani and Bangladeshi (combined due to sample sizes), and Chinese. Researchers sometimes include an 'Other' category comprising White and Black Mixed, White and Asian Mixed and other sundry groups. In order not to make the graph too congested, we do not show the data on the Other group here but will discuss them in the modelling part.

Panel 1 in Figure 1 shows the proportions in employment. It is clear that throughout the period, it is the White British and White Other men who had the highest rates of employment: around 90 per cent in employment up to 1980 and around 80 per cent thereafter. The employment situation was generally good in the 1970s with some, but not much, ethnic difference. After that time, the ethnic differences became much bigger and remained fairly constant. In much of the mid 1980s and in the early 1990s, the differences became very large indeed, especially for men of Black African and

[3] The sample size for the Chinese group is too small before 1983.

Pakistani/Bangladeshi heritage. In many of those years, the differences ran as much as some thirty percentage points. It is also noted that the differences between White Irish and Indian men on the one hand and the White British men on the other were, albeit noticeable, not very big, at around 7-10 percentage points. The line for the Black Caribbean men was somewhere in the middle. It is also noted that the employment rates of the Chinese men were drifting towards the low, which is confirmed by other data sources.[4] Although the reason awaits further exploration, it may well be a consequence of increasing Chinese participation in higher education (Li, 2006b).

The patterns on employment are, of course, closely related to those of unemployment and inactivity. Looking at the patterns and trends in the two lower panels of Figure 1, we find two main features. First, from around 1980 when the general economic situation became more unfavourable, the White groups were weakly, and Black Caribbean and Pakistani-Bangladeshi men strongly, affected in terms of having both higher unemployment and higher inactivity rates. In the second peak of economic recession in the early 1990s, it was again these two groups plus the Black African men who were disproportionately unemployed and inactive. Given that our samples were limited to men of working age, many of those in inactivity could well be 'discouraged workers', that is, those who believed that there were 'no suitable jobs for me' and who came to terms with life by taking earlier retirement or being on 'disability' benefits. In the sociological sense, much of the economic inactivity of the men in question, especially men from the more disadvantaged ethnic groups, could well be regarded as hidden unemployment.

As the economic situation improved in the last few years of our period, both the ethnic minority unemployment and inactivity rates moved back closer to the figures for the majority population, confirming the idea that ethnic minority worklessness is hypercyclical.

[4] This finding is confirmed by using the Home Office Citizenship Survey (2005), which shows that as against an overall rate of 78.8 per cent in employment in England and Wales for men aged 16-64, that for the Chinese was only 55.9 per cent, the lowest of all groups.

"Take in Figure 2"

The data in Figure 2 concern class positions. Here we differentiate three main classes: the salariat – professionals and managers; the intermediate class – office clerks, small employers, manual supervisors, and lower technicians; and the working class – skilled, semi-skilled and unskilled manual workers including agricultural labourers. The patterns and trends of class occupancy by men in each of the ethnic groups are shown in the three panels respectively.

With regard to access to the salariat (Panel 1), the most striking feature that manifests itself is the continued expansion of 'room at the top'. Take the White British men for example. In 1972, around 20 per cent were found in this class. In 2005, the proportion doubled. Yet, the good fortune was not equally shared. The rates for men of Pakistani/Bangladeshi heritage fluctuated before the 1990s and remained at around 20 per cent after that.

Some other features are also noteworthy. First, the White British men were never the most likely to gain access to the salariat throughout the period covered. The White Other men were in fact the most likely to gain access to this class. Men of Black African origins were constantly outperforming the White British in this regard, even though, as we have seen, they were much more likely to be out of employment in the recession years. In this sense, the Black African group has the greatest within-group social stratification. The White Irish men were consistently lagging behind their White British counterpart in gaining access to this class up to the early 1990s but since then had been catching up and were surpassing the latter in the last few years of the period covered. Men of Indian and Chinese heritage were not much different from the White British in the entire period covered. The fortunes of Black Caribbean men were consistently improving. In the earlier period, they had a gap of around 10 percentage points behind the White British men in terms of gaining access to the salariat and, in the last 10 years covered, the gap narrowed to around 5 points.

With regard to incumbency in the intermediate class, we find that men of Chinese, Pakistani/Bangladeshi and Indian heritage were consistently more, and the two Black groups were less, likely to be in this class than their White British peers. Further

analysis (data not presented here but available on request) shows that the differences pertain mainly to self-employment. One cannot, in this regard, simply equate self-employment to advantage or disadvantage. For instance, the Chinese are most likely to be in self-employment but most of them are sole-traders, family businesses or small employers. By contrast, Black Africans are much less likely to be self-employed but for those amongst them who do become entrepreneurs, they are much more likely to be big employers than any other groups (Li, 2006b).

The patterns and trends on working-class occupancy (Panel 3) show substantial differences between ethnic groups. Throughout the period covered, the line for the White British men is in the middle, with lines for Black Caribbean and Pakistani/Bangladeshi and, in the earlier period, White Irish men above it. Men of White Other, Indian, Chinese and, in the earlier period, Black African origins were less likely to be in the manual working class.

The above is concerned with what might be called the 'gross' or 'raw' differences in labour market positions. We know that the different minority ethnic groups came to Britain at different time points, with nearly half (48.4 per cent) of Black Caribbean men born in Britain, as against only 17 per cent for the Chinese; that their educational qualifications varied enormously, with 24 per cent of Black African men as compared with only 6 per cent of Black Caribbean or 10 per cent of Pakistani/Bangladeshi men having a degree; and that their family circumstances also differed a great deal, with Pakistani/Bangladeshi men being two and a half times as likely to have dependent children as the White groups. All this may have an impact on employment and occupational attainment. It is thus important to take account of these factors in order to assess the 'net' or relative differences between ethnic groups.

In the following part of this section, we address the issue of relative effects in gaining access to employment and avoidance of unemployment, and in gaining access to the salariat and avoidance of other classes, controlling for personal attributes and human capital indicators. We also carried out an analysis comparing employment versus unemployment plus inactivity (that is, versus non-employment). The patterns are similar (data not presented but available on request) but since in this age group

inactivity contains students, early retired, disabled, 'discouraged workers' etc, we believe it conceptually more useful to compare employment with unemployment.

The data are in Tables I and II where we present logistic regression coefficients. We code employment = 1 and unemployment = 0, and salariat = 1 and other classes = 0, for analysis in the two tables respectively. In both tables, we conduct four models. In Model 1, we use only the ethnic groups (and we include the 'Other' group here as noted above). In Model 2, we add personal attributes such as marital status, number of dependent children in household, and period effects where we differentiate earlier (1972-1980), middle (1981-1996) and later (1997-2005) periods. In Model 3, we add human capital indicators such as age and education for experience and skills, and country of birth for nativity effects, hence first or second generation. Finally, in Model 4, we add interaction effects for each of the main minority ethnic groups and the middle/later periods. This way, we can not only see the effects of personal and human capital variables, we can further see the changes in the coefficients associated with the ethnic groups as we include more variables in the models. Moreover, we can discern whether and to what extent any of the ethnic groups were making progress and catching up with the majority population as time went on from the earlier to the later periods.

"Take in Table I"

The data in Model 1 of Table I show that, taking the 34 years as a whole, White Other men were slightly (but not significantly) more, and men in all other ethnic groups (except the Chinese) were significantly less, likely to be in employment as compared with White British men. Judging from the magnitude of the coefficients we find that Black and Pakistani/Bangladeshi men were very much more likely to bear the brunt of unemployment. Turning to Model 2, we find that the coefficients associated with the ethnic groups were similar to those in Model 1, that non-married and men with dependent children were significantly less likely to be in employment and that the employment situation was particularly adverse in the middle period. In Model 3, the various coefficients for the respective variables were similar to those in Model 2 but additionally, we find that nativity does not make a significant difference, and that age and education have the marked effects as expected, that is, a curvilinear association

between age and employment and the positive association between educational level and employment. The absence of nativity effects is at first sight rather surprising, but this has been confirmed by other research (see for example, Model, and Fisher, 2002; Heath and Yu, 2004; Lindley et al, 2006).

We now turn to consider whether ethnic minorities have been narrowing the net gap over time. Controlling for all the prior variables, the interaction effects in Model 4 show that White Irish men significantly improved their employment chances as the time went on, that the White Other and Chinese men were never significantly different from the White British, that Indian men were initially disadvantaged but were no longer so in the later periods, and that on the whole, it was the Black Caribbean, Black African and Pakistani/Bangladeshi men who were not found to have made significant improvement in their employment chances. Indeed, the net position of these three groups was actually worse in the two later periods than it had been in the first period.

"Take in Table II"

Turning to data on access to the salariat as shown in Table II, we find some expected patterns, such as those associated with marital status, family situation, period, age, and education. One notable difference from the previous table concerns the nativity effects. Holding constant all other variables in the models, men who were foreign-born were significantly more likely to find themselves in the salariat, although the size of this effect was rather small. This, however, does not mean that all foreign born men were equally advantaged in gaining access to the salariat. Further analysis, holding constant all other variables in model 3, shows that foreign-born men in the White Irish and White Other groups were not significantly different from, but foreign born men in all non-White ethnic groups were significantly *less* likely than the White British men, to be in the salariat (data not shown but available on request).

Focusing finally on the changes over time in the net ethnic differences, as shown by the interaction effects in Model 4, we find that White Irish men were quickly catching up and were indeed outperforming their White British counterparts in the later periods; that White Other men were always outperforming their White British peers;

that Black Caribbean men were making pronounced progress which formed a sharp contrast to their Black African counterparts; that men of Indian and Chinese origins were generally close to, although the former were experiencing some 'penalty' in the middle period as compared with the White British; and that Pakistani/Bangladeshi men's disadvantages were somewhat, but not significantly, ameliorated in the process of time.

We thus find rather different patterns of progress over time with respect to occupational attainment and to unemployment. Most notably, Black Caribbeans were falling behind in terms of unemployment but catching up in access to the salariat, Black Africans were the only group whose net position deteriorated on both criteria.

Discussion and conclusion

In this paper, we have analysed the labour market situation of different ethnic groups in Britain covering a long period of 34 years from 1972 to 2005. Although numerous research findings have been reported, especially in the last ten years thanks to the release of the 1991 SARs, this is the first ever systematic and rigorous analysis in this regard as we used the best data from the government surveys and standardised all the key variables. We analysed employment status and occupational attainment both in their raw patterns and trends and in their net effects. The main findings can be summarised as follows.

In terms of overall labour market situation, we found that White British and White Other men were consistently more likely to be in employment and in the salariat. White Irish men had a success story of climbing the stratification ladder. Indian men were generally little different from the White British, confirming existing research. Chinese men were likely to engage in small-scale self-employment thus avoiding the threats of unemployment. Black Caribbean men were mainly second generation or arriving before the 1970s and, lacking the 'cushion' of self-employment for whatever reasons, were most likely to face unemployment and inactivity, especially during the peak years of recession but were found to be steadily improving their access to the salariat. Black African men were most diversified: they were very highly qualified educationally and were little different from the White British men in gaining access to the salariat; on the other hand, they were most likely to face unemployment and

inactivity, especially during the early 1990s. Pakistani/Bangladeshi men were found most disadvantaged in gaining access to paid work and to the salariat, with a very large proportion turning to self-employment from the early 1990s onwards, perhaps as an 'escape strategy'.

Turning to the relative effects, our findings, particularly those on age and education, strongly support the human capital theories and show the importance of controlling for these variables. Holding constant all the personal and socio-cultural factors, we find that White Other men generally did better than, and Indian and Chinese men were little different from, the White British men; that White Irish and Black Caribbean men were making steady progress in gaining access to the salariat; and that Black African and Pakistani/Bangladeshi men were consistently found disadvantaged in employment and in access to the salariat, with increasing net disadvantage over time.

It is of course possible that there may be additional, unmeasured, selection effects (Borjas, 1995) in accounting for the disparate patterns of change over time. For example, it might be that the Africans or Pakistanis who were in Britain in the earliest period were more 'positively selected' than those who arrived later. The pioneers might well be more highly motivated and determined than their successors treading more familiar routes. In the case of our other groups – Indians, Irish, Caribbeans and Chinese – they had arrived rather earlier and so we would not observe any 'pioneer effect' in their case during our period. It is also possible that there have been changing patterns of migration from Africa over this period, in particular with greater number of refugees coming from countries such as Somalia in the later period.

While unmeasured selection effects may well explain the relative deterioration of the Pakistani and Black African position over time, it is less obvious how they can account for the growing polarization over time within the Black Caribbean community. As we saw, Black Caribbeans were disadvantaged both with respect to unemployment and with respect to access to the salariat in the early part of our period. By the later part of the period, their (net) situation with respect to unemployment had become even worse while their (net) situation with respect to the salariat had markedly improved, removing much of their earlier disadvantage. Why does this pattern apply to the Black Caribbeans and not to the other groups?

One important feature of the group of Black Caribbean ancestry is that it is one of the groups that has become socially most integrated with the majority population, as measured for example by levels of intermarriage (which reach up to 50% among the second generation). In this way it is quite different from the Indian or Pakistani groups (and even to some extent from the Chinese, whose high intermarriage rates are specific to the highly educated). This suggests that we may be seeing a version of 'segmented assimilation', although not in the sense proposed by Portes and Zhou (1993). In the Black Caribbean case we may be seeing segmented assimilation within a community whereas Portes and Zhou referred to segmented assimilation between communities. Thus for some Black Caribbeans we may be seeing assimilation into the white working class (although we would prefer to find a different term than assimilation since Caribbeans may well be transforming working-class white culture rather than simply assimilating to it). In contrast for other Black Caribbeans we may be seeing upward assimilation into the white middle class. What we may be seeing then is the effect of social capital, a variable which unfortunately is not available in our pooled dataset. This pattern of segmented assimilation is unlikely to be happening to the same extent with the Indian or Pakistani groups which have much lower rates of intermarriage and much higher rates of community closure.

All this shows that any simple, binary, account of ethnic relations is likely to be misleading. The White British do enjoy advantages in terms of employment but for class positions, there are more differences among the minority ethnic groups than between them and the White group. On the other hand, whilst some ethnic penalties are indeed found, we also found some encouraging signs, such as amongst the White Irish, Indian and even Black Caribbean groups. More concerted efforts are needed to help Black African and, *inter alia*, Pakistani/Bangladeshi groups to improve their labour market situations.

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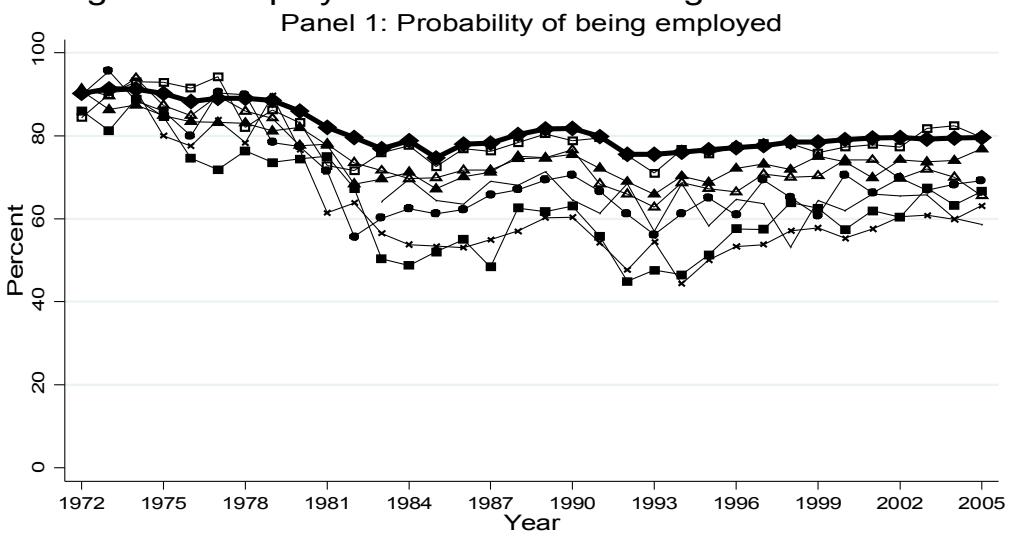
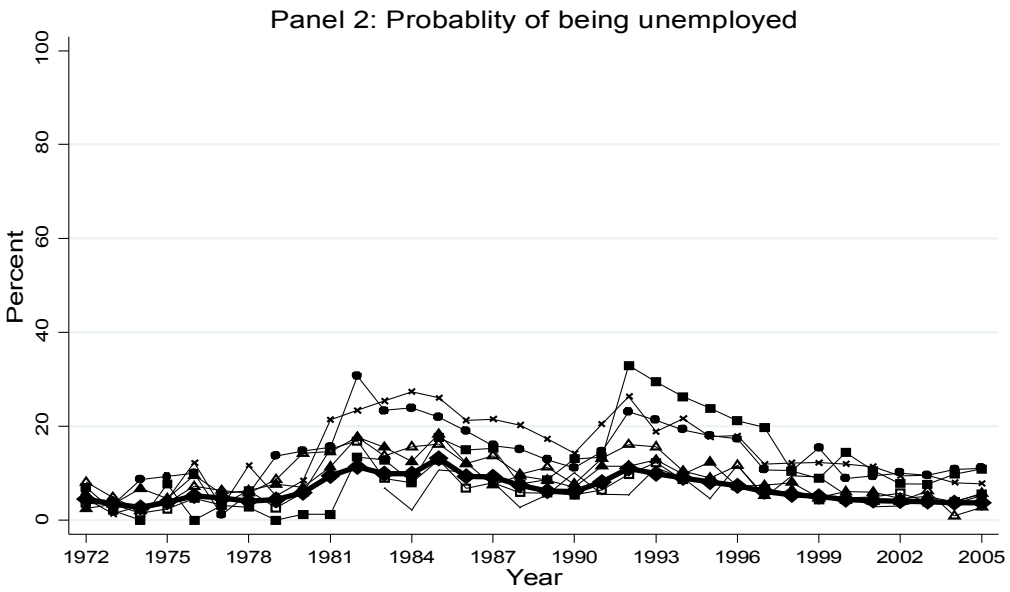
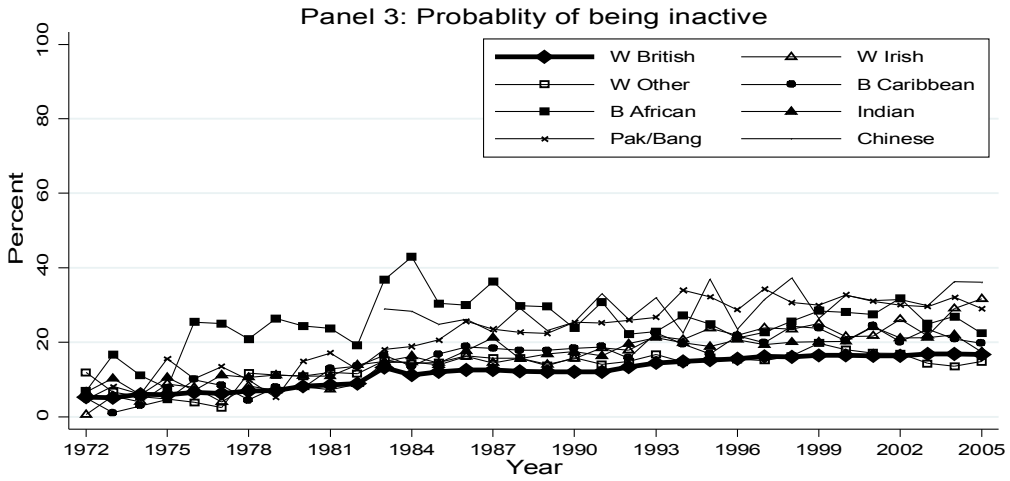
Figure 1: Employment status of men aged 16-64 in Britain

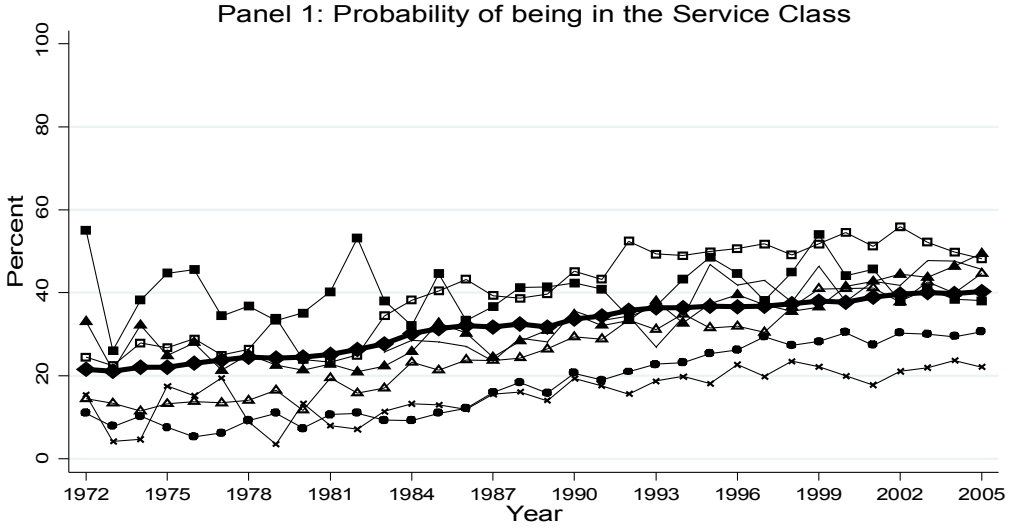


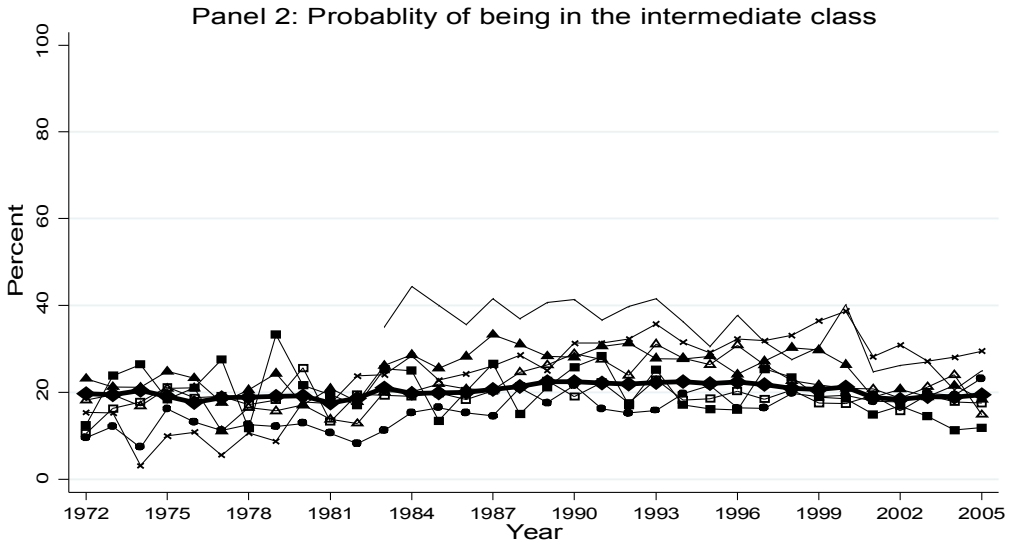


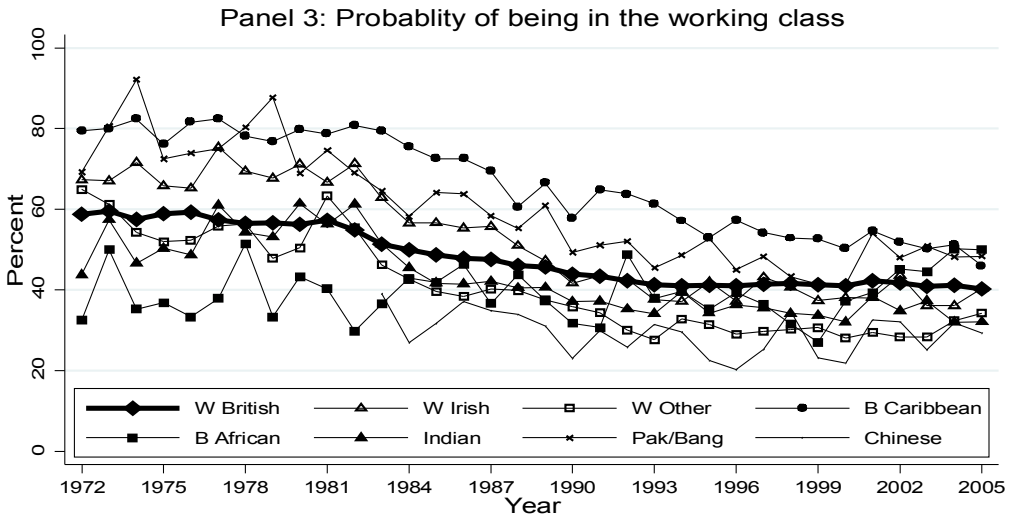


Note: The sample sizes for the Chinese are too small before 1983.
Source: Pooled data of GHS/LFS (1972-2005).

Figure 2: Class position of men aged 16-64 in Britain







Note: The sample sizes for the Chinese are too small before 1983.
Source: Pooled data of GHS/LFS (1972-2005).

Table I: Logit regression coefficients on employment

	Model 1	Model 2	Model 3	Model 4
Ethnicity				
White British (ref)	0	0	0	0
White Irish	-.383***	-.392***	-.408***	-.489***
White Other	.014	-.005	-.035	-.019
Black Caribbean	-.988***	-.945***	-.857***	-.492***
Black African	-.959***	-1.052***	-1.174***	.433
Indian	-.298***	-.333***	-.334***	-.325**
Pakistani/Bangladeshi	-1.109***	-1.187***	-.904***	-.079
Chinese	-.079	-.110	-.132	-.036
Other	-.589***	-.679***	-.626***	-.619***
Marital Status				
Married (ref)		0	0	0
Separated/divorced/widowed		-.695***	-.856***	-.856***
Single		-.485***	-.179***	-.180***
Number of children under 16 in HH		-.028***	-.066***	-.066***
Period				
Earlier (1972-1980) (ref)		0	0	0
Middle (1981-1996)		-.808***	-1.143***	-1.117***
Later (1997-2005)		-.267***	-.686***	-.672***
Country of birth				
UK born (ref)			0	0
Foreign born			.025	.017
Age				
Age (=age/10)			1.607***	1.609***
Age squared			-.173***	-.173***
Education				
Degree+			1.184***	1.184***
Professional below degree			1.175***	1.176***
A Levels or equivalent			.829***	.829***
O Levels or equivalent			.706***	.706***
Primary or no qualification (ref)			0	0
Interaction effects				
White Irish in middle period				.027
White Irish in later period				.391**
White Other in middle period				-.023
White Other in later period				.023
Black Caribbean in middle period				-.379**
Black Caribbean in later period				-.385**
Black African in middle period				-1.781***
Black African in later period				-1.512***
Indian in middle period				.001
Indian in later period				.052
Pakistani/Bangladeshi in middle period				-.901***
Pakistani/Bangladeshi in later period				-.735***
Chinese in middle period				-.044
Chinese in later period				-.167
Constant	2.438***	3.257***	-.226***	-.251***
Pseudo R^2	.006	.026	.078	.078
N	1,060,063	1,060,063	1,060,063	1,060,063

Note

1. For men aged 16-64 and resident in Great Britain. * p<0.05, ** p<0.01, *** p<0.001.

Source: Pooled data of GHS/LFS 1972-2005.

Table II: Logit regression coefficients on access to the salariat

	Model 1	Model 2	Model 3	Model 4
Ethnicity				
White British (ref)	0	0	0	0
White Irish	-.237***	-.210***	-.031	-.364***
White Other	.516***	.485***	.525***	.246***
Black Caribbean	-.675***	-.649***	-.468***	-.929***
Black African	.241***	.261***	-.256***	.392***
Indian	.049**	.019	-.158***	.000
Pakistani/Bangladeshi	-.755***	-.844***	-.573***	-.723***
Chinese	.192***	.159***	-.036	.308
Other	.148***	.193***	.208***	.209***
Marital Status				
Married (ref)		0	0	0
Separated/divorced/widowed		-.247***	-.289***	-.289***
Single		-.279***	-.104***	-.104***
Number of children under 16 in HH		.029***	-.034***	-.033***
Period				
Earlier (1972-1980) (ref)		0	0	0
Middle (1981-1996)		.690***	.133***	.134***
Later (1997-2005)		.765***	-.036***	-.053***
Country of birth				
UK born (ref)			0	0
Foreign born			.045*	.044*
Age				
Age (=age/10)			1.841***	1.840***
Age squared			-.195***	-.195***
Education				
Degree+			3.811***	3.813***
Professional below degree			2.629***	2.631***
A Levels or equivalent			1.118***	1.119***
O Levels or equivalent			1.276***	1.278***
Primary or no qualification (ref)			0	0
Interaction effects				
White Irish in middle period				.291**
White Irish in later period				.546***
White Other in middle period				.145
White Other in later period				.499***
Black Caribbean in middle period				.369*
Black Caribbean in later period				.671***
Black African in middle period				-.706***
Black African in later period				-.750***
Indian in middle period				-.257**
Indian in later period				-.040
Pakistani/Bangladeshi in middle period				.134
Pakistani/Bangladeshi in later period				.183
Chinese in middle period				-.456
Chinese in later period				-.243
Constant	-.563***	-1.169***	-5.853***	-5.850***
Pseudo R^2	.003	.011	.244	.245
N	1,019,766	1,019,766	1,019,766	1,019,766

Note

1. For men aged 16-64 and resident in Great Britain. * p<0.05, ** p<0.01, *** p<0.001.

Source: Pooled data of GHS/LFS 1972-2005.

Period, life-cycle and generational effects on ethnic minority success in the British labour market

Anthony Heath and Yaojun Li

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(This version is a draft. Revisions are underway. Please do not quote without permission from the authors.)

Introduction

Many studies have demonstrated ethnic disadvantage in the labour market (Van Tubergen and Kalmijin, 2005, Kalter and Kogan, 2006; Heath and Cheung, 2007; Li and Heath, 2007). Most of this research, however, has been static and has relied on single cross-sectional analysis. A key unanswered question is whether this disadvantage is declining over time or across generations. A dynamic analysis is likely to give us a much better understanding of the generative processes that lies behind the cross-sectional picture of disadvantage. It is also likely to have some major policy implications.

The aim of this paper therefore is to use repeated cross-section data in order to trace the experiences of different generations of ethnic minorities over time in the British labour market. In particular, we propose to examine life cycle, generational and period effects on ethnic minority experience in the labour market. It is important to distinguish between these three processes, since it is well established that there are career processes within the labour market (for example career processes in attaining intergenerational mobility into professional and especially managerial work, period effects with labour market situation and unemployment changing over time, and generational change with younger generations being much more highly educated than older ones). The three processes are likely to be even more important in the case of migrants and their descendants, where they are also likely to take somewhat different characters from those in the majority workforce.

There have been many suggestions in the literature that life cycle or career processes will be important for new migrants. Migrants tend initially to be quite disadvantaged on arrival in a foreign country but then gradually improve their position, relative to the native-born, as they acquire labour market experience and other skills, such as a degree of fluency in the domestic language, an understanding of recruitment and work practices, and so on in the western labour market. In his classic work, Gordon (1964) referred to these as processes of acculturation and regarded them as among the first to occur. (Confusingly, economists often term these processes 'assimilation', which has a quite different meaning in the sociological literature.)

On somewhat similar grounds, it can be argued that there will be major generational processes, with the children of migrants having host country qualifications, fluency in the main language, host country work experience and social connections. They will also tend to have host-country expectations and frames of reference, whereas the migrant generation may be more oriented to their countries of origins, sending remittances home and in many cases perhaps expecting to return home themselves. On these grounds we would expect the second generation to expect much less disadvantage in the labour market than the parental generation experienced.

We can also expect some period effects. A third set of arguments suggests that there will be a gradual improvement for both generations over time as the context in the destination country gradually changes. This might be expected to happen partly because younger generations in the majority population tend to be generally somewhat more liberal and less ethnocentric than older generations, partly because of the passage of explicit anti-discrimination legislation (such as the 1976 and 2001 Acts in Britain), and partly because of increased contact between members of majority and minority groups, which is often held to increase tolerance.

Historically, this picture has been held to apply to a considerable extent to the experience of migrants from Europe to the USA, and their descendants, over the course of the twentieth century. However, while we can in general expect to see some progress over time on all three counts in Western Europe in more recent decades, it is much less clear that the progress will be shared equally by all ethnic groups and whether the basically optimistic experience of white migrants to the USA will be repeated in the case of the 'new' migrants and their children from less developed countries. Much of the debates in the US have focussed on issues of migrant selectivity, which we do not expect to apply to Britain in the same way (since in Britain immigration rules have become successively more restrictive over time, suggesting in fact a possible trend towards greater positive selectivity). However, some of the other arguments might still apply.

In the case of life cycle processes, it has been suggested that, while a process of intra-generational catching up may occur, parity may never be achieved by culturally-distant groups, especially since language is harder to acquire the later the stage at which it is learned. In addition, groups that exhibit a higher degree of community closure (such as Pakistanis or Indians in the British context) may be slower to develop bridging social ties with the majority population and hence acculturation may be slower than for black Caribbean or White Other groups from English speaking countries.

In the case of generational processes, Borjas (1992, 1995) has convincingly suggested that human capital externalities may leave a legacy of disadvantage for later generations, delaying processes of inter-generational catching-up, perhaps indefinitely. Heath and Cheung (2007) have argued similarly that the conditions of the migrant generation may have implications for later generations, with groups that were composed largely of guest-workers in the first generation continuing to display disadvantage in later generations because of human capital externalities. This suggests that inter-generational progress may be greater for groups who initially had relatively high human capital, such as the Africans, Chinese and Indians, rather than for groups with low original human capital such as Pakistanis and Bangladeshis, and to a lesser extent Caribbeans (where the first-generation women were relatively highly educated).

In the case of period effects, the contact hypothesis suggests that it is contact under conditions of equality that promotes tolerance. This suggests, first, that groups such as Indians and especially Pakistanis and Bangladeshis who have higher levels of community closure, as shown by their low intermarriage rates and higher geographic concentration, may not develop reciprocal tolerant attitudes at the same rate as those of, say, Chinese and Caribbeans. In addition, the war in Iraq and associated anti-Muslim feeling suggests that in the most recent period progress might be limited for Muslim groups.

We hypothesize then that we should see life cycle, generation and period (over time) improvements in the position of migrants and their descendants in the British labour market. However, we also hypothesize that, for a variety of different reasons, progress on all fronts will be less for the Pakistani and Bangladeshi groups, will be

greatest for the White Other and Chinese groups, with African, Indian and Caribbean groups in between.

Data and methods

We explore these issues using the pooled cross-sections of the General Household Survey (GHS) and the Labour Force Survey (LFS) from 1972-2005 following through the experiences of pseudo-cohorts of 'early arrivals' (people who had arrived in Britain by the 1970s and whose children are now entering the labour market), the 'second generation' (native-born ethnic minorities, the children of the early arrivals, entering the labour market in the 1990s and 2000s), and 'recent arrivals' (people who migrated to Britain and entered the labour market at the same time as the second generation.[1]

The pooled data set has around 4.7 million records with nearly 420 thousand minority ethnic members. This, to our knowledge, is the largest, most systematic, and most carefully-constructed data source ever assembled covering a long period of thirty-four consecutive years, with all the key variables coded to be consistent over time. The variables standardised include ethnicity, country of origin, time of arrival, age, marital status, educational qualifications, employment status, class, earnings from the labour market, number of children in family unit, and hours of work. For ethnicity, we differentiated nine main groups: White British, White Irish, White Other, Black Caribbean, Black African, Indian, Pakistani/Bangladeshi, Chinese and Other (including 'Mixed'). This kind of differentiation is more detailed than is available in most existing research on ethnic relations using quantitative data and it enables us to conduct a thorough investigation of the economic situation of the various minority ethnic groups in Britain in the period covered. For instance, we can investigate the socio-economic situation of one of the long-standing and largest immigrant groups to Britain, namely, the Irish (from the Republic of Ireland rather than from Northern Ireland).

We differentiate three periods on the grounds of political-economic situation in Britain: 1972-1980 as the first period as a generally prosperous period; 1981-1996 as the second period which was under the Conservative Government and which also saw serious economic recession; and 1997-2005 as the third period under New Labour. With regard to generation status, we differentiate first and second generation, the former referring to people coming to the UK in their adult life (after the age of 16) and the latter to those born in the country or arriving by the age of 16 who thus received full or at least part of the British education and whose English proficiency would not cause any major problems in job-seeking or career advancement. We also differentiated four cohorts. Cohort 1 refers to people born between 1940 and 1949 and, in the case of the first generation, arriving by 1971. Cohort 2 refers to people born between 1950 and 1959 and, in the case of the first generation, arriving between 1972 and 1980. Cohort 3 refers to people born between 1960 and 1969 and, in the case of the first generation, arriving between 1981 and 1996. And, finally, Cohort 4

[1] We are grateful to the ESRC for funding this research (*Socio-economic position and political support of the BMEs in Britain (1971-2004)*, ESRC (RES-163-25-0003)) and for the UK Data Archive for making data accessible to us. We alone are responsible for any error that might exist in the analysis and interpretation of the data reported in this paper.

refers to people born between 1970 and 1979 and, in the case of the first generation, arriving between 1997 and 2005.

We focus both on experiences of unemployment and on occupational attainment. With regard to unemployment, we confine our analysis to those in the labour market, and with respect to occupational attainment, we focus on access to the salariat, namely, professional and managerial positions for those lucky enough to have a job (Heath and Cheung, 2007). The analysis is conducted for men aged 16 to 64 and women aged 16 to 59, and resident in Great Britain at the time of interview. Even with such restrictions imposed, there are around 1.3 million records for men and 1.2 million records for women.

(Table 1 about here)

The schematic framework for our analysis is shown in Table 1 where we have put the mean rounded age in each cell (see also Heath and Yu, 2004: 197 for a similar discussion). Take the data for men in the last period (1997-2005 for example. The mean ages are 56, 46, 36 and 27 respectively for the four cohorts, and the differences with regard to our outcome variables (unemployment or access to the salariat) would represent cohort effects. Within each cohort, the mean ages become older as we move from the first to the last period, and the effects revealed here would represent the age or life cycle effect. Lastly, the patterns for people at similar chronological ages but interviewed at different periods will represent the period effects, such as the comparison between cohort 1 in period 1 and cohort 2 in period 2 and cohort 3 in period 3. What is essential for this research is that, within each cohort, we are going to compare the fortunes between the White British (the reference group) and the minority ethnic groups, with the latter further differentiated by first and second generation as defined earlier, and with both first and second generation further differentiated into eight detailed groupings as earlier noted.

We wish to point out at this juncture that even though this is the most authoritative data source available in Britain, and even though the pooled dataset has been as carefully constructed as possible, there are some potential problems using the data for our research purposes at hand. First, this is not panel data, so when we talk about 'life cycle' effects, we are not observing the same people at different time points. Secondly, as the cohorts we constructed include first generation immigrants who arrived at different time points, the early and the late arrivals were rather different in their ethnic composition and may carry rather different human capital or 'selectivity' characteristics. For instance, amongst the minority ethnic immigrants, Black Caribbeans came rather early to fill in the vacancies in the NHS and the public transport in the 1950s and the 1960s, but few came in the later period (10.5, 2.8 and 1.6 per cent in the three arrival periods of before 1971, 1972-1980, and 1981-1996 respectively); by contrast, Pakistani/Bangladeshi groups were later arrivals (7.2, 14.7 and 13.2 per cent respectively). This difference reflects the historical context in which the minority groups were allowed to come to the UK (see Heath, 2007 for a detailed account) and will have an impact on our analysis. Thirdly, the youngest cohort had not entered the labour market in the first period (1972-1980), hence empty cells would constitute structural zeros. Furthermore, the third cohort in period 1 and the fourth cohort in period 2 would also have the cells rather sparsely populated, especially when we examine the detailed groupings for the first and the second generation

minority ethnic groups. Yet, notwithstanding these difficulties, we believe that this is the best data source available and that an analysis in this regard is what could possibly be obtained.

Results

We present, in this section our results on unemployment and access to the salariat. The presentation proceeds in three parts: patterns and trends; descriptive analysis of age, cohort and period effects, and statistical modelling of the effects. All analysis is conducted for men and women separately.

Patterns and trends in unemployment and access to the salariat

The data in Figure 1 show the percentages in unemployment and in salariat positions for men and women in Britain from 1972 to 2005 for the eight main groups (data for Others are not shown). As is clearly seen in the figure, the White British men and women were generally less likely than other groups to face unemployment. Also evident in the figure is the feature that the period covered witnessed two peaks of unemployment, especially for men. In much of the mid 1980s and in the early 1990s, the overall unemployment rates were over 10 per cent. In the 1970s and from the late 1990s onwards, the unemployment rates were much lower.

(Figure 1 about here)

The data show a marked feature of the 'hyper-cyclical' nature of unemployment for minority ethnic groups, that is, 'when unemployment rates increase generally, those for ethnic minorities increase even more rapidly' (Heath, 2007). The rates for Black Caribbean and Pakistani-Bangladeshi men in the two peaks, and that for the Black African men in the early 1990s, were two to three times higher than that of the White British. The rates for the Black Caribbean and Black African women in the two peaks were also around twice as compared with the White British women. It is noted here that further analysis reveals that around 70 per cent of Pakistani/Bangladeshi women were economically inactive throughout the period covered.

With regard to the salariat positions, it is clear that the period saw a continued improvement in the occupational structure in Britain, namely, a much increased proportion of professional and managerial positions. Take the White British for example. Around 20 per cent of the men were found in the salariat at the beginning of the period, which was doubled by the end of the period. The proportion for women increased from around 15 per cent to around 36 per cent.

Three other features manifest themselves in the figure with respect to access to the salariat. Firstly, White British men and women were neither the most likely nor the least likely to find themselves in the advantaged salariat positions. In fact, White Other men and women, and Black African men were consistently more likely to be found in the salariat. Secondly, White Irish men were much disadvantaged in terms of access to the salariat in the earlier period but caught up with and even surpassed the White British men in the later period. A largely similar pattern is also found for White Irish women who lagged behind the White British women in the middle years covered but caught up with and surpassed the latter in the last few years covered. Black Caribbean men also showed considerable progress in the period covered,

although they were still behind most of the other groups. Black Caribbean women were generally found more likely to be in the salariat than the White British women. Thirdly, for men and women alike, one finds that it is the Pakistani/Bangladeshi groups who were least likely to be in the salariat, and who showed the least progress in upward social mobility.

While the data in Figure 1 show the patterns and trends of unemployment and access to the salariat, they do not show the specific patterns of age, cohort and period effects. This we do in the following analysis.

Descriptive analysis of age, cohort and period effects on unemployment and salariat
The descriptive analysis is presented in two ways. First, in order to gain a panoramic view of the minority ethnic disadvantage, we combined all visible minority ethnic groups into a single category (BME) and differentiate the BME into first and second generation, and compare the age, cohort and period effects with the White British. Secondly, following that, we present the data for the detailed ethnic groups. For both kinds of analysis, we also present the results of statistical analysis, namely, difference of proportions, between the relevant categories with the White British reference group. The layout of the data is as depicted in Table 1.

(Table 2 about here)

The data in Table 2 shows the percentages of the various groups in unemployment, by ethnicity/generation, cohort, period and sex. Looking first at the unemployment data for men, we see the expected period effects at work, with risks of unemployment increasing in our middle period and then declining somewhat, but not back to the levels of the original period. As unemployment rates fluctuate according to the overall economic situation at the supra-national level, the patterns in Table 1 would reflect the period effects more than the life cycle effects. The cohort effects are, however, clear. Take the data for White British men in the middle period for example. The rates for the oldest cohort were 7 per cent, and increased to 9 per cent, 14 per cent and 17.5 per cent for the younger cohorts. What is more important for our purposes here is the difference between the White British and the visible minority groups, and the generational differences amongst the latter groups. Here we find two features of interest. First, in the peak of unemployment, the generational differences for men are slight. Both first and second generations of BME groups were much more likely to experience unemployment than their White British counterpart in all cohorts. The younger the cohorts, the greater the differential between the BME and the White British. Take the second generation men in the middle period for example. The differential with the White British men were 6.5 percentage points in the oldest cohort, rising to 7.4, 8.4 and 14.4 points for the three younger cohorts. Secondly, the relative advantage of the second generation over the first generation is only available for the first cohort in the last period, and not for the other three cohorts, a feature reflecting age effects. Thirdly, compared with men, the women's unemployment rates were smaller in scale but similar in character.

(Tables 3 and 4 about here)

As we saw in Figure 1, the unemployment fortunes varied widely across the minority ethnic groups, with the Indians and the Chinese little different from the White British.

Therefore we could expect that the patterns in Table 2 conceal much of the variation. The data in Table 3 for men and Table 4 for women show the full details.

With regard to the patterns for men (Table 3), we focus on the unemployment patterns in the middle period as the ethnic disadvantages are shown most markedly in this period. In the oldest cohort, White Irish, Indian and the Black groups were around twice as likely as the White British to be unemployed, and the Pakistani/Bangladeshi men were about three times as likely. In the second cohort, the differences between the first generation and the White British were generally small and non-significant, except for the Pakistani/Bangladeshi men (24 per cent as compared with 9 per cent for the White British). The second generation differentials were in the order of Indian, White Irish, Black Caribbean, Black African and Pakistani/Bangladeshi. For the third cohort, the disadvantages for the first generation were most pronouncedly shown for Black African and Pakistani/Bangladeshi men who were one out of three found jobless. White Irish and Indian men gradually acquired parity with the White British men. It is noted that the Chinese were rarely different from the White British in terms of unemployment. If anything, they were less likely to be unemployed in all cohorts and across all periods. The patterns for women (Table 4) were generally similar to those of men, albeit to a lesser extent.

(Table 5 about here)

Having looked at the patterns for unemployment, we turn to access to the salariat. Existing research in social mobility (Heath, 1981; Goldthorpe, 1987) would, in this regard, lead us to expect the joint effects of increasing room at the top and occupational majority. With regard to the first point, we find, again for men as an example, that at similar ages, later cohorts were more fortunate than earlier ones. 28 per cent of the White British men in the oldest cohort were found to be in the salariat in the first period, and the percentages increased to 38 and 43 for the younger cohorts of similar ages observed in the later periods. With regard to the second point, it has been observed that men aged around 35 would reach their '"occupational maturity", in the sense that from then onwards one may expect if not a cessation, at all events a marked falling-off in the probability of job changes which involve major shifts of occupational level' (Goldthorpe, 1987: 52-3). Our data show that this might be true of the patterns in the early 1970s on the basis of which Goldthorpe and Heath were conducting their classical mobility research. Given the expansion of education and the delayed entry into the labour market by many young people, the age of occupational maturity seems to have been pushed back some ten years. As shown in Table 1, the mean ages for the oldest cohort in the three periods were 31, 44 and 56. We find occupational maturity at around 44 years of age.

Of the greater interest here is the comparison between the minority ethnic groups and the British White in gaining access to the salariat. Here one finds that, for men in the two older cohorts, both first and second generations of the BMEs tend, with some exceptions, to be less likely to be in the salariat. However, for the two younger cohorts, the second generation were little different from and, if anything, more likely than the White British to be in the salariat.

With regard to women, we find that except for the first generation in the two middle cohorts, the minority ethnic women were, if anything, more likely to find themselves

in the salariat than the White British women. We have noted earlier that our analysis on the salariat was limited to those in active labour market participation. This suggests that, as compared with the British White peers, working women from ethnic minority groups may be more 'positively selected'. Further analysis shows that in each of the three periods, the first generation BME women tend to work the longest hours (the mean hours worked by White British, first generation and second generation BME women were 29.1, 35.4 and 32.5 hours per week in the first period; 29.4, 34.8 and 33.1 hours per week in the second period; and 31.2, 34.5 and 32.7 hours per week in the last period).

(Tables 6 and 7 about here)

The detailed data on ethnicity/generation status were shown in Tables 6 and 7 for men and women respectively. Looking at the data in Table 6, we find that White Irish men were progressively approaching and surpassing the White British men in successive cohorts and periods. Black Caribbean men were also increasingly reducing their differentials with the White British. Black African men in work were highly likely to find themselves in the salariat although, as we saw earlier, they were also highly likely to be unemployed. Pakistani/Bangladeshi men were making relatively the least progress. With regard to the patterns for women (Table 7), we find that most ethnic minority women in work were either little different from, or more likely than, their White British counterparts to be in the salariat. Here the most remarkable feature is the progress of Indian women whose youngest cohort has become more successful than the White British in gaining incumbency in the salariat.

Statistical modelling on unemployment and access to the salariat

Having looked at the raw patterns and trends associated with ethnicity/generation status in unemployment and access to the salariat by cohort and period, we now move to see the net effects. As the classical APC (age-period-cohort) modelling tends to be on fairly constant entities such as mortality (Yang, Fu and Land, 2004; Smith, 2004) and as our unemployment and salariat data have shown themselves to be constant, we intend to devise some different measures for period and cohort effects. With regard to cohort (age or life cycle) effects, we use age and age squared (operationalised as age/10 and its square, which also captures some of the effects on labour market knowledge, a crucial element in human capital theory). With regard to period effect, we constructed annual rates in unemployment (salariat) in each government region as measures for period effect. As we have seen, unemployment rates fluctuate, depending on the economic cycle. Further analysis also shows that even in the same year, unemployment rates vary by region. For instance, in 1984, 7.3 per cent of the respondents in South East were unemployed whereas the rates in the North, Yorkshire and Humberside, North West, West Midlands, Wales and Scotland were around twice as high. The prevalence of salariat positions also vary by region. Take 2005 for example. 34.9 per cent of the employed were in the salariat, which was 16 points lower than that in Greater London. Thus, the annual regional situation in unemployment and in salariat would capture the period effect for the different ethnic groups.

We conduct three models for each of our outcome variables of interest. In Model 1, we include indicators for generation effects (assess by ethnicity/generation), cohort effects (assessed by age and age squared) and period effects (assessed by annual rates

in unemployment or salariat by region). In Model 2, we include human capital indicators (assessed by educational qualifications and marital stats, see Heath and Cheung, 2007; Li and Heath, 2007; Chun and Lee, 2001), and in Model 3, we further include interaction between ethnicity/generation and the annual regional rates in unemployment (or salariat). We hope that this will allow us to the net effects of period, life-cycle and generation effects more clearly.

(Table 8 about here)

The data in Table 8 pertain to unemployment for men. The life-cycle shows a clear curvilinear effect as can be expected. The period effect also shows that when unemployment rates rise, people tend to experience more vulnerability. Controlling for these, we find that, apart from second generation White Other and Chinese groups, all other groups have higher unemployment rates than the White British men.

Looking at the data in Model 2, we first notice that the human capital indicators have their predicted effects. The lower the level of educational qualification, the higher the risk of unemployment. Non-married men also, holding constant all other variables in the model, tend to be more likely to face unemployment. Comparing the coefficients for ethnicity/generation in this model with those in Model 1, we find that they are generally reduced. Yet, for both first and second generation Black African men, the coefficients became noticeably larger, suggesting that even at the same educational level, the Black Africans were more likely to be unemployed. Indeed, just by the magnitude of the coefficients, we find that first and second generation Black African, and first generation Pakistani/Bangladeshi men were the most disadvantaged. Although the Black African and Pakistani/Bangladeshi groups were on the opposite ends in terms of educational attainment, with the former most likely to hold degree qualifications and the latter least likely (see Figures 1 and 2 in the Appendix), their fortunes in unemployment were rather similar. A most telling feature is shown in the interaction effects in Model 3. Here we find that the hyper-cyclical nature of unemployment applies mostly to the Black Africans of both generation, and then to first generation Pakistani/Bangladeshi men, and then to first generation men of Indian heritage (as around 13 per cent of people from India are of Muslim religion, the effects seen here may be seen more effectively in terms of religion than ethnicity. We do not have harmonised data on religion in the pooled GHS/LFS and cannot test this. For separate analysis, see Li, 2007; Heath and Li, 2007).

(Table 9 about here)

Turning to the unemployment data for women as shown in Table 9, we find one notable difference with men's data in Table 8, namely, never married women are no different, other things being equal, with married women, whereas never married men were disadvantaged in comparison with married men. With regard to other data, we find similar patterns, especially in Model 2 where we see that controlling for cohort and period effects, and for human capital indicators, both first and second generation Black African and Pakistani/Bangladeshi women stood out as the most disadvantaged. As we noted earlier, around 70 per cent of the latter group were not in active labour market in the period covered. Thus, even for those who opted for gainful employment in the face of cultural constraints, the Pakistani/Bangladeshi women faced much harsher ethnic penalty than most other groups (except Black African women).

Finally, we find, in the part for interaction effects, that the first generation Black African women were particularly penalised: as the unemployment rates rose, theirs rose much higher, at an odds ratio of ($e^{.052}$ =) 1.053 as compared with the White British women. In other words, as the annual unemployment rate in the region increased, the rate for the first generation Black African women would, holding constant all other personal characteristics as controlled for in the model, rise around 5 per cent higher than that for the White British women.

(Table 10 around here)

Having looked at the unemployment, we now move to access to the salariat. As can be expected from the literature on social mobility and unemployment, the signs associated with many of the minority ethnic groups will be negative in terms of access to the salariat as they are in the positive in terms of unemployment, depicting the same underlying theme of ethnic minority disadvantage in the British labour market.

With respect to the data on men (Table 10) we find in Model 1 controlling for cohort and period effects that it was first and second generation Black Caribbean and Pakistani/Bangladeshi men who were least likely to gain access to the salariat. When human capital indicators are controlled for in the second model, we find that the basic patterns associated with these groups remain much the same, although the sizes of the coefficients were reduced to varying degrees. Another notable feature is concerned with the first and second generation Black African men: controlling for human capital reduced the first generation's logged odds from -.148 to -.563, and those of the second generation from .318 to -.123. This shows that even for those in work and with the same educational qualifications, the chances of promotion are rather different, with the Black and Pakistani/Bangladeshi men at a notable disadvantage.

Looking at the data in the interactions in Model 3, we find that while White Irish and White Other men, and to some extend Black Caribbean and Indian men, benefited from the 'enlarged room at the top', Black Africans in the first and the second generation had worse fortunes for their qualifications. Perhaps they were over-qualified.

(Table 11)

Finally in this section, we look at the data on women's access to the salariat. Again different from men's patterns, we find that White Irish, White Other and Black Caribbean women were relatively advantaged in gaining access to the salariat at the same qualificational levels, and it was mainly the Black African, Indian, Pakistanit/Bangladeshi and Chinese women who were experiencing relative disadvantages. While Indian and Chinese women's relative chances were improving with the overall improvement of the occupational structure, the two Black groups' relative chances were deteriorating (Model 3, interactions).

Discussion

We have, in this paper, used the most authoritative data source from the GHS/LFS with all key variables standardised and the data span a long period of thirty-four years. We have focused on unemployment and access to the salariat by first and

second generation minority ethnic groups in the British labour market. Our descriptive analysis was conducted in the framework of disclosing cohort, age, period and generation effects. We have also conducted statistical modelling exercises taking into account such effects as well as human capital indicators.

Given the amount of the data and given our main interest in exploring the net disadvantages or ethnic penalty experienced by the minority ethnic groups in the first and the second generation, we believe that the patterns could be best summarised by looking at the net effects revealed by Model 3 of our modelling work in Tables 8-11. To facilitate the discussion, we have presented the net disadvantages in graphs (Figures 2-3), predicted values for the ethnic groups controlling for all the variables in Model 3.

(Figure 2 about here)

For the first generation ethnic groups, Black African and Pakistani/Bangladeshi men experienced the greatest impact of the hyper-cyclical nature of unemployment, and the penalty dealt to Black Caribbean men were half as harsh. Yet for the second generation, Black African, Pakistani/Bangladeshi and Black Caribbean men had similar distances among them, and in the first period covered, it was Black Caribbean men who experienced the highest unemployment. First and second generation Indian and White Irish men also had much higher unemployment rates as compared with White British men with similar qualifications and other personal characteristics. White Other and Chinese men were little different from the White British men.

With regard to women, both first and second generation Pakistani/Bangladeshi women suffered the greatest ethnic penalty. Second generation Black Caribbean women were also notably more likely to be unemployed than their first generation peers, so were Indian women to a lesser extent. While White Irish men were much more likely than White British given similar personal attributes, White Irish women were little different from White British women. White Other and Chinese women in both generations were also close to the White British women, with scarcely noticeable differences.

(Figure 3 about here)

Did the minority ethnic groups equally share the benefits from the improvement in the occupational structure? The data in Figure 3 show that first generation White Other men were the most likely to find themselves in the salariat throughout the period, and yet the relative position of first generation Black Caribbean men was falling behind the White British, and that the first generation Pakistani/Bangladeshi men did not show any improvement in the occupancy of the salariat.

For the second generation men, we find again the greatest likelihood of White Other men in the salariat. Here do find that as compared with the overall shape for the first generation, the relative distances between the groups were much smaller, indicating considerable intergenerational improvement in the upward mobility patterns. Second generation Black Caribbeans showed signs of catching up, and yet the progress was far from satisfactory. From the early 1990s onwards, their catching up seems to come to a halt. The relative disadvantage of the second generation Pakistani/Bangladeshi

men remained, although, as earlier noted, they were making considerable headway as compared with their first-generation peers.

With regard to women, various studies have noted the recruitment of the Black Caribbean women into the NHS (Heath and Yu, 2004; Heath and Cheung, 2007), and we indeed find that first generation Black Caribbean women were highly likely to find themselves in the salariat, only slightly below the White Other. The greatest divergence here is the contrast between first generation Pakistani/Bangladeshi and White British women.

If there are any signs for optimism, it is found in access to the salariat by the second generation women. Here, with the exception of Pakistani/Bangladeshi women, the ethnic groups 'cluster' together with little differences amongst them. And this clustering is much more compact than found in the case of second generation men.

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Tables and Figures

Table 1 Age, period and cohort (mean age rounded)

	Men			Women		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
Born 40-9, 1st g arrival bf 1971	**31**	**44**	**56**	**31**	**44**	**55**
(N)	20,274	167,430	68,327	20,885	170,941	57,497
Born 50-9, 1st g arrival 1972-80	**22**	**34**	**46**	**22**	**34**	**46**
(N)	17,468	166,680	69,944	17,329	173,325	73,147
Born 60-9, 1st g arrival 1981-96	**17**	**25**	**36**	**17**	**25**	**36**
(N)	3,512	178,709	80,288	3,397	186,854	88,066
Born 70-9, 1st g arrival 1997-05	-	**19**	**27**	-	**19**	**27**
(N)	-	65,522	46,037	-	65,795	48,350

Notes:

Age (life cycle) effect (same cohort, different periods or time of survey)

Cohort effect (different age, different cohort, same period);

Period effect (same age, different cohort, different period).

Source: The GHS/LFS (1972-2005).

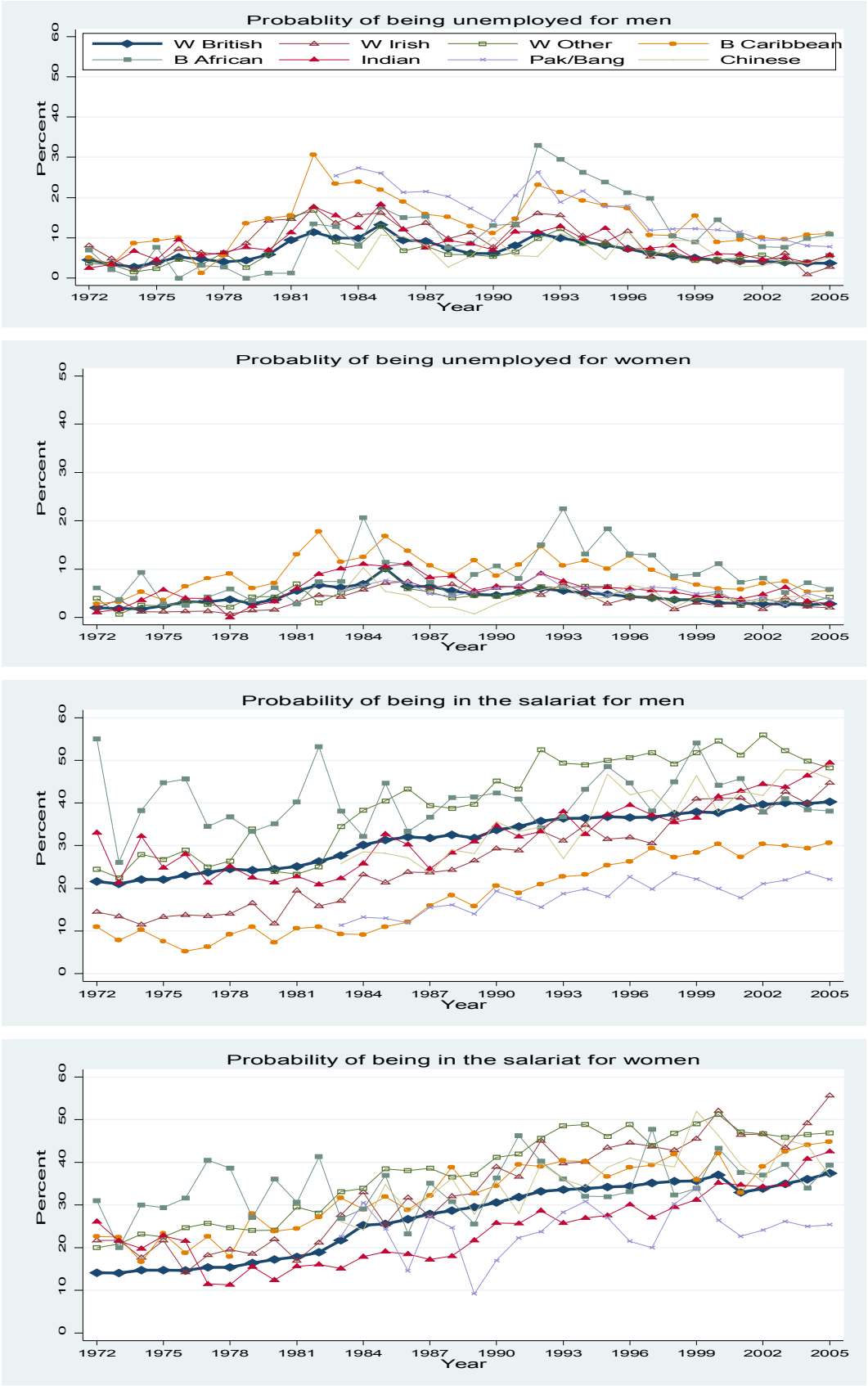


Figure 1: Unemployment and salariat for men and women in Britain (1972-2005)

Note: Data for Chinese and Pakistani/Bangladeshi not shown before 1983 due to small sample.
Source: Pooled data of GHS/LFS (1972-2005).

Table 2 Unemployed rates (%) by cohort, ethnicity, generation, sex and period

	Men			Women		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
Born 40-9, 1st g arrival bf 1971						
White British (ref)	3.9	7.1	4.0	4.4	5.9	2.8
1st generation BME	3.6	13.4***	10.3***	4.8	9.8***	6.6***
2nd generation BME	3.9	13.7***	6.9**	3.8	10.7***	6.1**
Born 50-9, 1st g arrival 1972-80						
White British (ref)	6.7	8.9	3.6	6.5	8.4	2.8
1st generation BME	12.2†	13.4***	5.4**	10.3	11.1***	5.2***
2nd generation BME	7.6	16.3***	7.9***	9.7***	13.1***	6.8***
Born 60-9, 1st g arrival 1981-96						
White British (ref)	13.2	14.0	3.9	12.8	11.5	3.6
1st generation BME	-	25.0***	9.9***	-	22.8***	10.4***
2nd generation BME	12.9	22.4***	7.5***	9.4	19.8***	6.5***
Born 70-9, 1st g arrival 1997-05						
White British (ref)	-	17.5	6.8	-	12.7	5.2
1st generation BME	-	-	10.5***	-	-	11.6***
2nd generation BME	-	31.9***	12.7***	-	25.5***	11.4***

Notes

1. For men aged 16-64 and women aged 16-59, resident in Great Britain and active in the labour market. Data not shown for marginal distributions (N<=30) (same below).
2. BME refers to black and minority ethnic groups, including people of mixed origins but excluding White Irish and White Others. 2nd generation refers to those born in the UK or arriving by the age of 16. Arrival time refers to 1st generation (same below).
3. Significance tests are conducted for BMEs with White British as the reference group. †p<0.10, *p<0.05, ** p<0.01 and *** p<0.001 (same below).

Source: The pooled General Household Survey (1972-2005) and Labour Force Survey (1983-2005) (same below).

Table 3 Unemployed rates (%) by cohort, full ethnicity/generation and period for men

	Born 40-9, 1st g arrival bf 1971			**Born 50-9, 1st g arrival 1972-80**			**Born 60-9, 1st g arrival 1981-96**			**Born 70-9, 1st g arrival 1997-05**		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
White British (ref)	3.9	7.1	4.0	6.7	8.9	3.6	13.2	14.0	3.9	-	17.4	6.8
1st gen White Irish	6.4	14.1***	5.8	-	19.4***	5.9	-	16.3*	4.2	-	-	2.9
1st gen White Other	2.8	6.1	3.4	-	10.0	4.4	-	8.7***	5.2†	-	-	6.6
1st gen Black Caribbean	7.7†	13.1***	12.3***	-	15.6†	-	-	14.3	12.5**	-	-	11.4
1st gen Black African	0.0	16.9***	11.3**	-	14.7*	8.3*	-	35.3***	13.1***	-	-	16.6***
1st gen Indian	2.5	11.9***	7.1**	23.8***	9.9	3.0	-	17.4	6.6*	-	-	5.2
1st gen Pakistani/Bangladeshi	4.3	22.5***	19.8***	-	23.9***	10.4***	-	32.6***	8.4***	-	-	10.0*
1st gen Chinese	-	1.4*	7.0	-	9.3	5.8	-	9.1	6.1	-	-	4.1
1st gen Other/Mixed	6.7	8.3	7.6*	-	15.7***	5.4	-	21.2***	11.5***	-	-	11.2***
2nd gen White Irish	6.4	14.0***	8.0***	13.0*	15.6***	4.7	-	17.3†	3.5	-	17.0	11.9
2nd gen White Other	1.1	5.4*	4.4	6.0	8.3	3.7	-	14.5	3.4	-	16.5	7.9
2nd gen Black Caribbean	2.1	19.1***	6.4	17.4***	19.4***	7.2***	25.0*	28.8***	9.8***	-	38.5***	15.0***
2nd gen Black African	2.5	18.5**	-	2.1†	21.5***	10.9*	-	27.7***	8.0**	-	46.9***	15.7***
2nd gen Indian	3.9	14.1***	8.3*	8.3	11.3**	4.2	22.5†	14.5	4.6	-	28.7***	9.3**
2nd gen Pakistani/Bangladeshi	-	22.0***	9.8†	10.3	25.8***	15.0***	-	25.3***	8.6***	-	35.2***	14.3***
2nd gen Chinese	-	9.5	-	-	3.8*	0.0	-	9.9	5.3	-	22.2	6.9
2nd gen Other/Mixed	4.2	8.0	5.0	6.3	11.8**	7.2***	8.3†	23.0***	8.6***	-	25.6***	14.7***

Table 4 Unemployed rates (%) by cohort, full ethnicity/generation and period for women

	Born 40-9, 1st g arrival bf 1971			**Born 50-9, 1st g arrival 1972-80**			**Born 60-9, 1st g arrival 1981-96**			**Born 70-9, 1st g arrival 1997-05**		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
White British (ref)	4.4	5.9	2.8	6.5	8.4	2.8	12.8	11.5	3.6	-	12.7	5.2
1st gen White Irish	0.0	8.2**	1.2	-	8.3	4.2	-	8.9†	2.1	-	-	5.6
1st gen White Other	1.5	6.5	3.7	8.7	9.1	3.3	-	11.1***	4.6†	-	-	6.4†
1st gen Black Caribbean	2.9	8.9**	1.3	-	10.1	2.8	-	30.0***	15.0***	-	-	14.3*
1st gen Black African	4.2	13.8***	11.1**	-	10.5	10.8***	-	32.0***	14.5***	-	-	14.4***
1st gen Indian	9.6*	9.4***	9.0***	4.9	11.1**	4.3†	-	18.5***	6.5**	-	-	13.2***
1st gen Pakistani/Bangladeshi	-	19.1***	-	-	17.1***	8.6**	-	38.6***	16.7***	-	-	24.2***
1st gen Chinese	-	6.6	6.1	-	6.3	6.3	-	9.3	6.0	-	-	8.0
1st gen Other/Mixed	-	8.5†	7.3**	-	11.9*	3.4	-	20.4***	8.7***	-	-	9.2***
2nd gen White Irish	2.6	7.7*	4.3	7.3	10.5†	2.7	-	10.6	3.9	-	24.5**	5.1
2nd gen White Other	4.1	5.2	1.8	11.5†	8.8	2.9	-	10.8	4.8*	-	12.8	5.6
2nd gen Black Caribbean	7.4	10.1**	9.6***	14.4***	15.2***	6.8***	11.8	22.0***	6.0***	-	33.4***	13.0***
2nd gen Black African	-	14.6*	-	13.9*	15.8**	10.8**	-	22.8***	9.2***	-	32.1***	16.3***
2nd gen Indian	3.6	9.5†	2.6	8.2	11.2***	4.8*	-	16.6***	3.6	-	19.1***	7.4**
2nd gen Pakistani/Bangladeshi	-	-	-	-	17.5***	16.0***	-	33.9***	8.4***	-	27.4***	13.7***
2nd gen Chinese	-	-	-	-	3.3†	2.4	-	8.4	3.1	-	17.5	6.9
2nd gen Other/Mixed	2.6	10.2**	5.6	7.8	11.6**	7.0***	10.4	17.2***	9.4***	-	25.3***	13.0***

Table 5 Access to salariat (%) by cohort, ethnicity, generation, sex and period

	Men			Women		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
Born 40-9, 1st g arrival bf 1971						
White British (ref)	27.8	39.9	39.7	20.1	30.9	32.5
1st generation BME	24.9	29.8***	33.8**	31.5***	34.1**	38.7**
2nd generation BME	31.4*	29.4***	32.6*	31.7***	37.5***	42.5**
Born 50-9, 1st g arrival 1972-80						
White British (ref)	17.0	38.1	45.3	18.1	35.7	39.5
1st generation BME	29.2**	32.1***	38.8***	16.1	29.9***	33.7***
2nd generation BME	15.4	32.8***	42.4	18.0	35.5	45.6*
Born 60-9, 1st g arrival 1981-96						
White British (ref)	4.3	26.8	43.3	5.3	31.7	40.5
1st generation BME	-	32.3***	35.5***	-	24.3***	33.4***
2nd generation BME	7.4*	26.1	44.8	5.7	30.5	48.2***
Born 70-9, 1st g arrival 1997-05						
White British (ref)	-	14.4	37.2	-	17.4	41.0
1st generation BME	-	-	35.5	-	-	46.2**
2nd generation BME	-	19.5***	44.3***	-	16.1	46.5***

Notes

1. Salariat refers to respondents in professional or managerial positions who were working at the time of interview.

Table 6 Access to the salariat (%) by cohort, full ethnicity/generation and period for men

	Born 40-9, 1st g arrival bf 1971			**Born 50-9, 1st g arrival 1972-80**			**Born 60-9, 1st g arrival 1981-96**			**Born 70-9, 1st g arrival 1997-05**		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
White British (ref)	27.8	39.9	39.7	17.0	38.1	45.3	4.3	26.8	43.3	-	14.4	37.2
1st gen White Irish	12.1***	25.8***	29.9***	-	38.2	44.8	-	41.8***	54.7***	-	-	77.6***
1st gen White Other	30.0	41.5	40.1	-	47.3***	49.4	-	45.3***	61.1***	-	-	50.1***
1st gen Black Caribbean	11.1**	16.9***	14.0***	-	43.4	-	-	30.0	35.7	-	-	17.9*
1st gen Black African	43.9**	45.1	40.4	-	51.5**	67.7***	-	38.2**	47.3	-	-	25.4**
1st gen Indian	27.7	31.2***	34.1†	12.5	23.9***	33.3***	-	28.8	32.5***	-	-	67.2***
1st gen Pakistani/Bangladeshi	13.4*	21.5***	26.2*	-	16.5***	17.5***	-	13.6***	17.1***	-	-	8.4***
1st gen Chinese	-	27.7**	42.5	-	35.3	36.9	-	56.7***	46.8	-	-	63.6**
1st gen Other/Mixed	-	46.9**	54.9***	-	51.8***	51.8†	-	40.8***	43.9	-	-	37.8
2nd gen White Irish	18.1*	26.6***	30.2**	-	30.8†	-	-	37.7†	30.8	-	-	-
2nd gen White Other	36.1†	48.8***	54.0***	-	44.6*	39.2	-	31.2	44.1	-	20.4	29.0
2nd gen Black Caribbean	21.7	15.7***	22.2**	8.3*	28.3***	42.2	-	20.8***	39.6†	-	17.1	35.8
2nd gen Black African	61.5***	52.3†	-	-	56.4**	-	-	34.8*	57.6***	-	26.2*	51.7**
2nd gen Indian	42.6***	33.7*	28.4*	23.6	33.6†	43.3	-	32.8**	48.7*	-	22.5***	51.5***
2nd gen Pakistani/Bangladeshi	-	13.4***	18.9*	-	19.1***	19.7***	-	23.1	35.0*	-	16.1	33.3†
2nd gen Chinese	-	15.8**	-	-	30.4	-	-	43.5*	37.5	-	26.5†	45.9
2nd gen Other/Mixed	28.4	35.3*	46.9	14.7†	35.9	48.1	8.7*	26.8	49.0*	-	16.7	47.9***

Table 7 Access to the salariat (%) by cohort, full ethnicity/generation and period for women

	Born 40-9, 1st g arrival bf 1971			**Born 50-9, 1st g arrival 1972-80**			**Born 60-9, 1st g arrival 1981-96**			**Born 70-9, 1st g arrival 1997-05**		
	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05	1972-80	1981-96	1997-05
White British (ref)	20.1	30.9	32.5	18.0	35.7	39.5	5.3	31.7	40.5	-	17.4	41.0
1st gen White Irish	35.2***	34.4*	40.5**	-	51.1***	48.9*	-	56.9***	61.7***	-	-	63.0***
1st gen White Other	26.9	43.5***	44.7***	38.1***	51.4***	51.7***	-	41.9***	59.7***	-	-	47.0***
1st gen Black Caribbean	35.0***	45.5***	45.6***	-	57.3***	42.9	-	22.9	33.3	-	-	-
1st gen Black African	45.7***	40.2*	47.5*	-	38.1	43.1	-	31.8	39.5	-	-	29.0**
1st gen Indian	16.9	18.8***	27.2	7.7*	17.7***	22.8***	-	14.8***	25.3***	-	-	53.3**
1st gen Pakistani/Bangladeshi	-	38.5	-	-	27.9†	20.6**	-	13.2*	19.2***	-	-	-
1st gen Chinese	-	40.7*	-	-	44.4*	47.5	-	27.3	41.3	-	-	43.6
1st gen Other/Mixed	-	44.6***	40.5	-	40.3†	48.2*	-	33.3	36.3	-	-	51.9***
2nd gen White Irish	18.2	29.0	35.0	-	36.1	-	-	42.4†	-	-	-	-
2nd gen White Other	21.3	39.9***	40.0***	-	43.9**	54.0*	-	29.3	40.0	-	10.9	37.2
2nd gen Black Caribbean	52.0***	45.7***	37.9	18.8	42.2*	47.7†	-	29.5†	46.3**	-	16.1	42.1
2nd gen Black African	-	31.4	-	-	42.6	-	-	29.2	58.0***	-	9.4	44.8
2nd gen Indian	30.8*	22.1*	37.8	15.1	24.9***	31.7	-	33.2	44.2	-	15.3	51.3***
2nd gen Pakistani/Bangladeshi	-	-	-	-	-	-	-	27.3	50.6†	-	15.7	41.6
2nd gen Chinese	-	-	-	-	37.1	-	-	32.4	59.5*	-	-	44.1
2nd gen Other/Mixed	24.3	37.8*	51.5***	16.8	36.1	54.1***	6.4	31.0	49.2***	-	18.4	47.1*

Table 8 Logit regression coefficients on unemployment for men

	Model I	Model II	Model III
White British (ref)			
1st gen White Irish	.594***	.436***	.256*
1st gen White Other	.092**	.072*	-.018
1st gen Black Caribbean	.835***	.573***	.394*
1st gen Black African	1.045***	1.173***	.473**
1st gen Indian	.442***	.390***	.094
1st gen Pakistani/Bangladeshi	1.299***	1.124***	.730***
1st gen Chinese	.281**	.168†	.484†
1st gen Other/Mixed	.699***	.710***	.419**
2nd gen White Irish	.603***	.447***	.207**
2nd gen White Other	.027	.156***	.232*
2nd gen Black Caribbean	.915***	.859***	.740***
2nd gen Black African	.830***	1.025***	.205
2nd gen Indian	.297***	.393***	.378***
2nd gen Pakistani/Bangladeshi	.994***	.892***	1.105***
2nd gen Chinese	-.043	-.042	.772*
2nd gen Other/Mixed	.339***	.483***	-.001
Age/10	-1.684***	-1.335***	-1.335***
Age/10 squared	.187***	.139***	.139***
Annual % unemployment by region	.125***	.115***	.113***
No qualification		.770***	.773***
Level 1		.323***	.325***
Level 2 (ref)			
Level 3		-.109***	-.109***
Level 4		-.474***	-.475***
Level 5		-.629***	-.629***
Married (ref)			
Once married		.874***	.874***
Single		.257***	.257***
Significant interactions (%=unemployment rate)			
Black African 1st gen*annual regional %			.080***
Indian 1st gen*annual regional %			.031**
Pakistani/Bangladeshi 1st gen*annual regional %			.042***
Other 1st gen*annual regional %			.033*
Black African 2nd gen*annual regional %			.093***
Pakistani/Bangladeshi 2nd gen*annual regional %			-.025*
Chinese 2nd gen*annual regional %			-.025*
Constant	-.171***	-.977***	-.959***
Log likelihood	-276708.7	-257116.6	-257056.9
Pseudo R^2	.062	.093	.093
N	987,461	943,004	943,004

Table 9 Logit regression coefficients on unemployment for women

	Model I	Model II	Model III
White British (ref)			
1st gen White Irish	.057	.043	.195
1st gen White Other	.202**	.213***	.218*
1st gen Black Caribbean	.617***	.469***	.676***
1st gen Black African	1.131***	1.169***	.735***
1st gen Indian	.717***	.650***	.873***
1st gen Pakistani/Bangladeshi	1.453***	1.336***	1.413***
1st gen Chinese	.247*	.312**	.658*
1st gen Other/Mixed	.688***	.704***	.608***
2nd gen White Irish	.283***	.210**	.377*
2nd gen White Other	.055	.143***	.079
2nd gen Black Caribbean	.772***	.833***	.722***
2nd gen Black African	.629***	1.062***	.953***
2nd gen Indian	.352***	.441***	.383***
2nd gen Pakistani/Bangladeshi	1.007***	1.029***	1.052***
2nd gen Chinese	-.137	-.010	.407
2nd gen Other/Mixed	.529***	.619***	.489***
Age/10	-1.208***	-1.145***	-1.144***
Age/10 squared	.117***	.093***	.093***
Annual % unemployment by region	.112***	.104***	.104***
No qualification		.630***	.633***
Level 1		.339***	.339***
Level 2 (ref)			
Level 3		-.081***	-.081***
Level 4		-.309***	-.309***
Level 5		-.264***	-.264***
Married (ref)			
Once married		.796***	.796***
Single		.004	.005
Significant interactions (%=unemployment rate)			
Black African 1st gen*annual regional %			.052***
Constant	-.980***	-1.089***	-1.089***
Log likelihood	-186238.5	-176678.9	-176669.3
Pseudo R^2	.056	.077	.077
N	760,137	734,220	734,220

Table 10 Logit regression coefficients on access to the salariat for men

		Model I	Model II	Model III
White British (ref)				
1st gen White Irish		-.435***	-.047	-.804***
1st gen White Other		.242**	.531**	-.859***
1st gen Black Caribbean		-1.497***	-1.018***	-1.814***
1st gen Black African		-.148**	-.563**	1.962***
1st gen Indian		-.380***	-.359***	-.768***
1st gen Pakistani/Bangladeshi		-1.189***	-.893***	-1.171***
1st gen Chinese		-.179*	-.025	-.842*
1st gen Other/Mixed		.047	.128***	.937***
2nd gen White Irish		-.453***	-.099*	.128
2nd gen White Other		.396***	.185***	.106
2nd gen Black Caribbean		-.614***	-.395***	-.204
2nd gen Black African		.318***	-.123	1.784***
2nd gen Indian		.068**	-.132***	-.063
2nd gen Pakistani/Bangladeshi		-.769***	-.615***	-1.056***
2nd gen Chinese		-.049	-.196*	-.540***
2nd gen Other/Mixed		.030	.027	.472***
Age/10		2.504***	1.665***	1.665***
Age/10 squared		-.237***	-.177***	-.177***
Annual % salariat by region		.045***	.020***	.020***
No qualification			-1.382***	-1.382***
Level 1			-.623***	-.628***
Level 2 (ref)				
Level 3			-.107***	-.107***
Level 4			1.960***	1.961***
Level 5			3.125***	3.129***
Married (ref)				
Once married			-.286***	-.286***
Single			.094***	.095***
Significant interactions (%=salariat rate)				
White Irish	1st gen*annual regional %			.021***
White Other	1st gen*annual regional %			.036***
Black Caribbean	1st gen*annual regional %			.022*
Black African	1st gen*annual regional %			-.062***
Indian	1st gen*annual regional %			.011**
Other	1st gen*annual regional %			-.019***
Black Caribbean	2nd gen*annual regional %			-.050***
Other	2nd gen*annual regional %			-.013***
Constant		-6.194***	-4.903***	-4.890***
Log likelihood		-543981.7	-415989.9	-415816.9
Pseudo R^2		.048	.240	.240
N		888,673	849,285	849,285

Table 11 Logit regression coefficients on access to the salariat for women

		Model I	Model II	Model III
White British (ref)				
1st gen White Irish		.292***	.331***	-.328
1st gen White Other		.324***	.446***	-.333**
1st gen Black Caribbean		.153***	.402***	1.487***
1st gen Black African		-.258**	-.488**	1.271***
1st gen Indian		-.778***	-.668***	-1.169***
1st gen Pakistani/Bangladeshi		-.689***	-.355**	.539
1st gen Chinese		.006	-.261**	-1.271**
1st gen Other/Mixed		-.097**	-.046	.531
2nd gen White Irish		-.009	.209***	-.426
2nd gen White Other		.339***	.107***	-.007
2nd gen Black Caribbean		-.015	.078*	.686***
2nd gen Black African		.051*	-.402***	.609
2nd gen Indian		-.074**	-.212***	-.446*
2nd gen Pakistani/Bangladeshi		-.149**	-.279***	-.072
2nd gen Chinese		.010	-.398***	-.669
2nd gen Other/Mixed		.041	-.076	.132
Age/10		1.814***	1.471***	1.473***
Age/10 squared		-.235***	-.171***	-.171***
Annual % salariat by region		.044***	.012***	.012***
No qualification			-1.081***	-1.082***
Level 1			-.348***	-.352***
Level 2 (ref)				
Level 3			.462***	.462***
Level 4			2.318***	2.318***
Level 5			3.183***	3.184***
Married (ref)				
Once married			.063***	.064***
Single			.108***	.108***
Significant interactions (%=salariat rate)				
White Irish	1st gen*annual regional %			.018***
White Other	1st gen*annual regional %			.020***
Black Caribbean	1st gen*annual regional %			-.031***
Black African	1st gen*annual regional %			-.042***
Indian	1st gen*annual regional %			.013*
Chinese	1st gen*annual regional %			.026*
Other	1st gen*annual regional %			-.014*
White Irish	2nd gen*annual regional %			.019**
Black Caribbean	2nd gen*annual regional %			-.016***
Black African	2nd gen*annual regional %			-.025**
Constant		-5.468***	-4.437***	-4.431***
Log likelihood		-418553.7	-318964.6	-318888.5
Pseudo R^2		.035	.240	.240
N		693,188	670,448	670,448

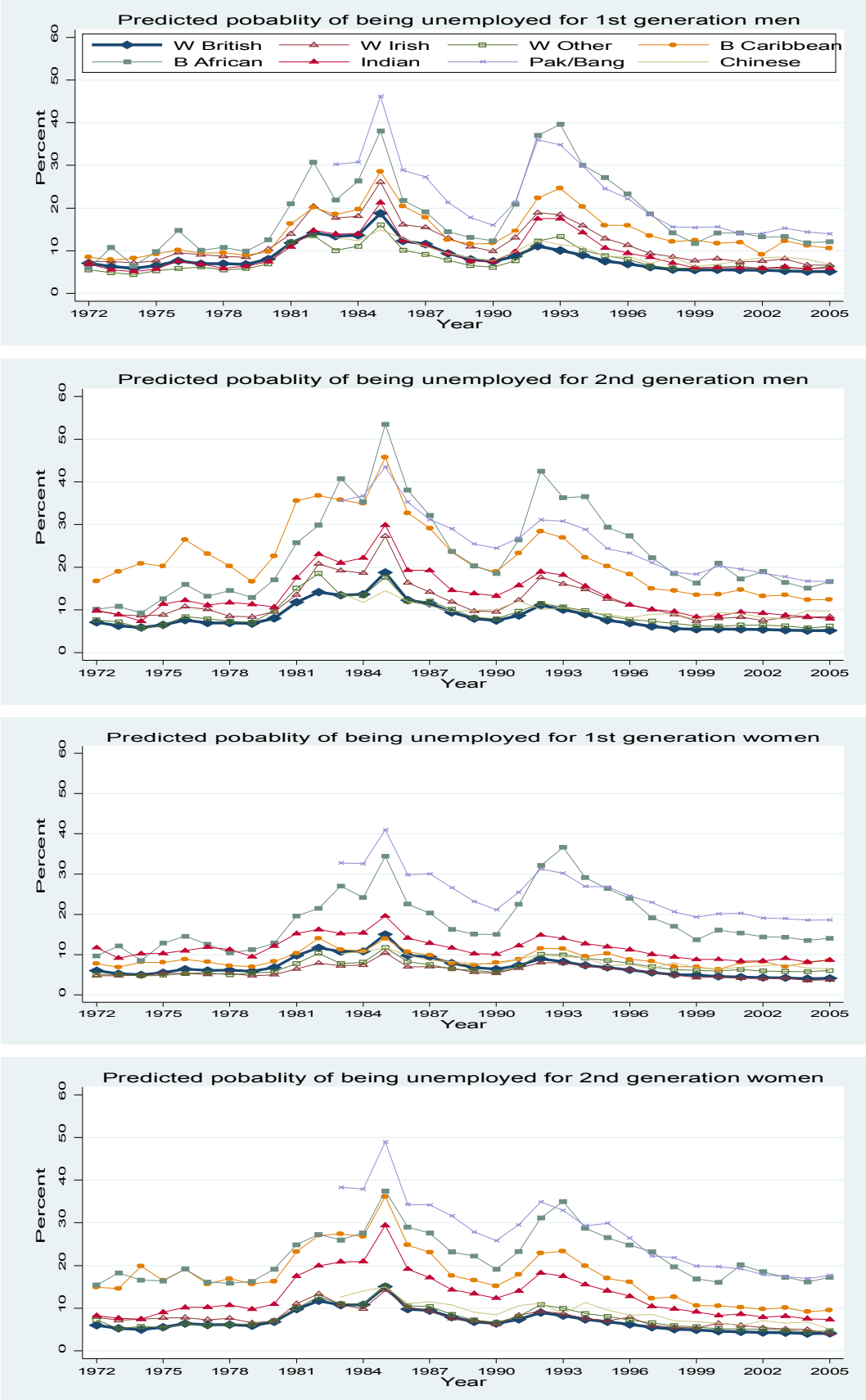


Figure 2: Predicted unemployment rates for men and women in Britain (1972-2005)
Note: Controlling for age, education, marital status and annual unemployment rate in region; data for Chinese and Pakistani/Bangladeshi not shown before 1983 due to small samples.
Source: Pooled data of GHS/LFS (1972-2005).

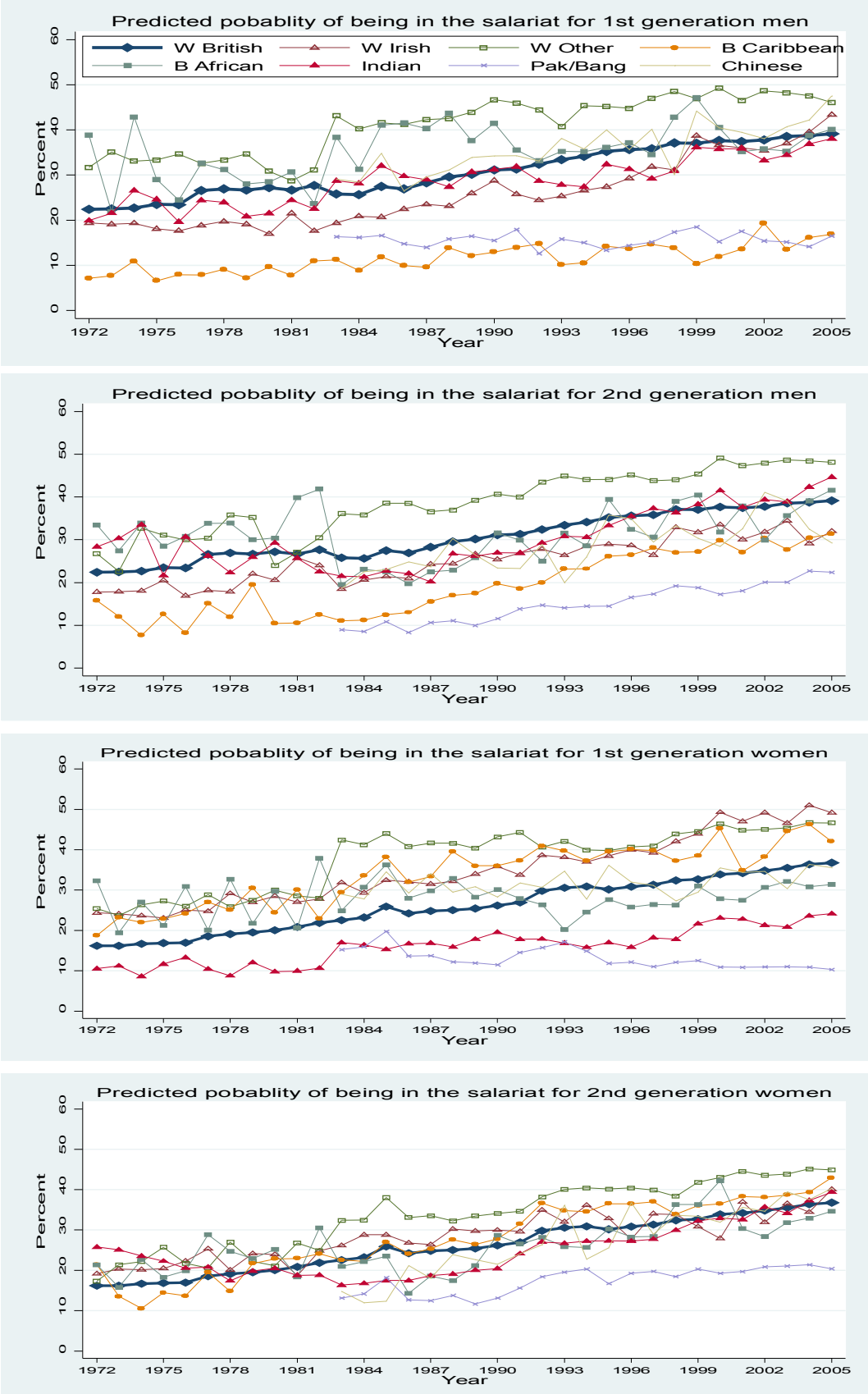


Figure 3: Predicted rates in the salariat for men and women in Britain (1972-2005)
Note: Controlling for age, education, marital status and annual salariat rate in the region; data for Chinese and Pakistani/Bangladeshi not shown before 1983 due to small samples.
Source: Pooled data of GHS/LFS (1972-2005).

Appendix

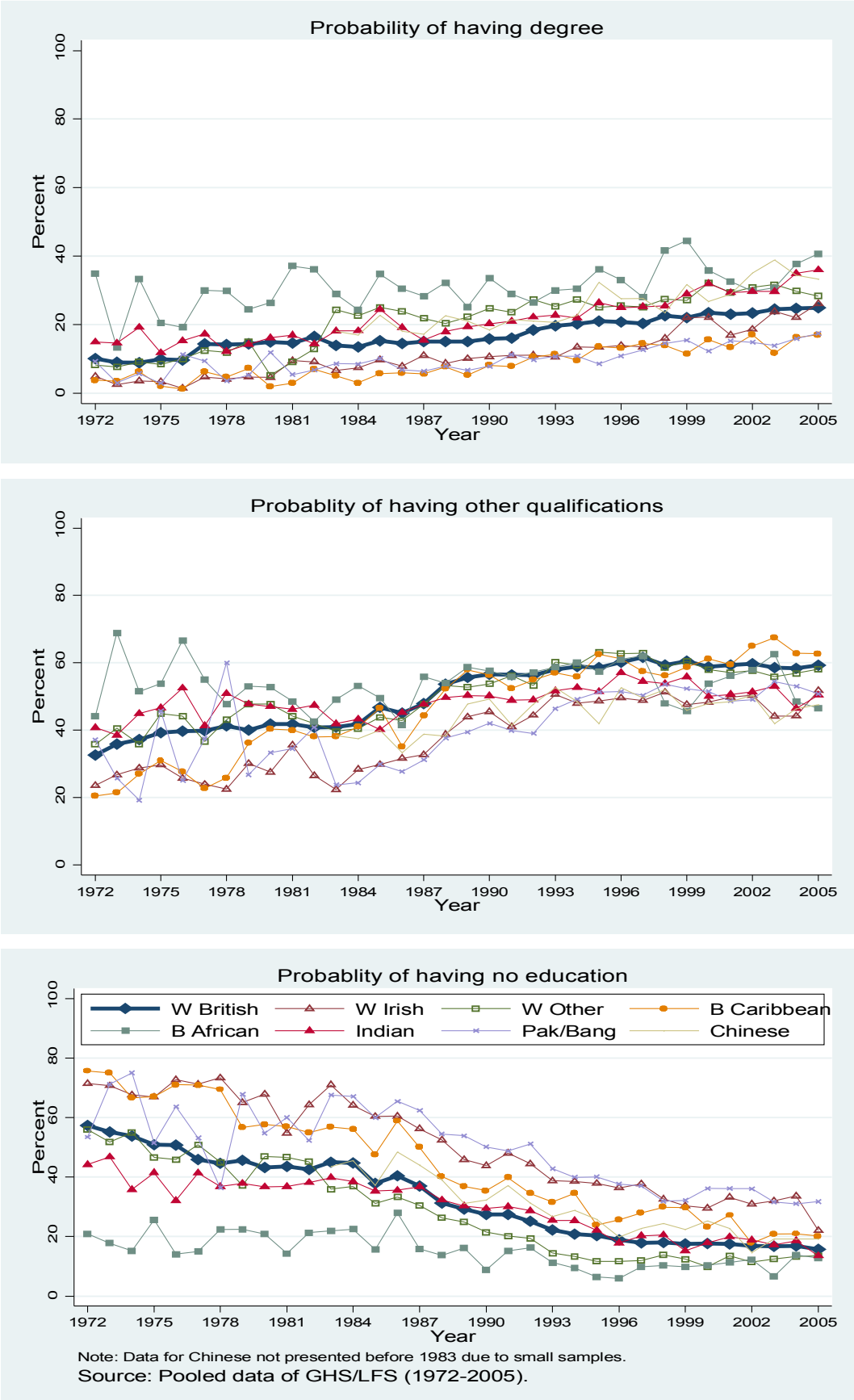
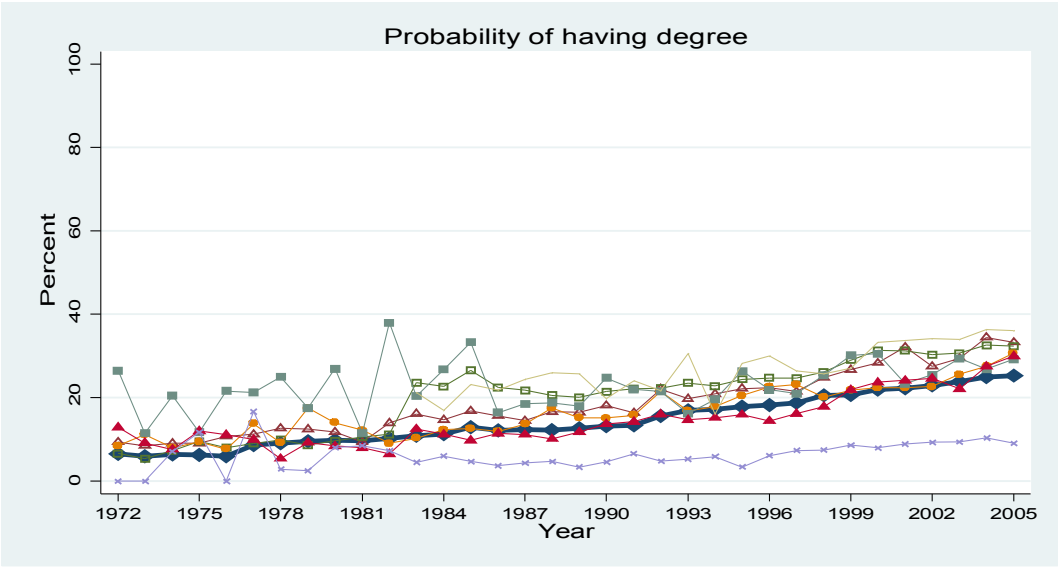
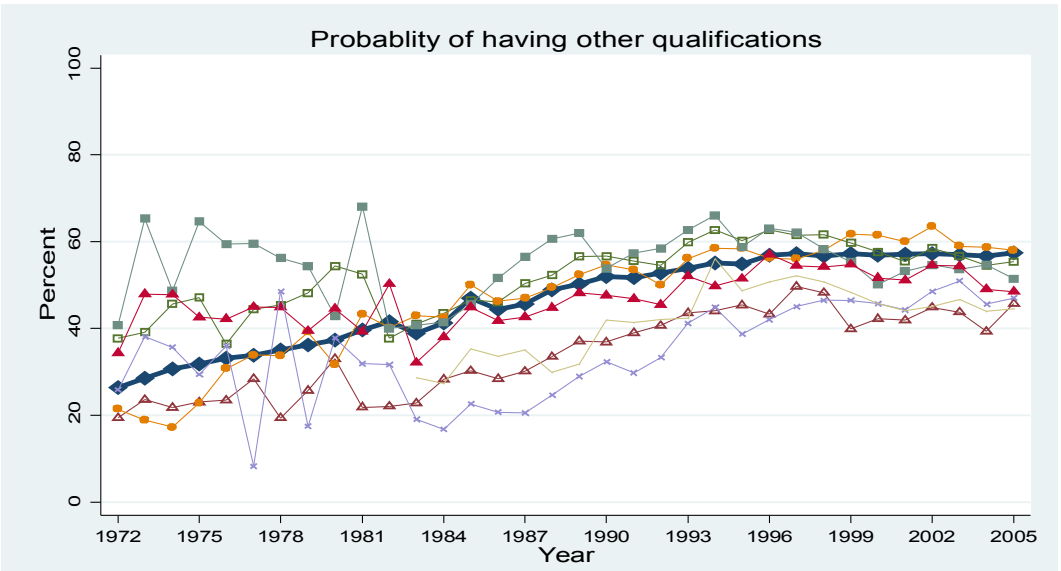
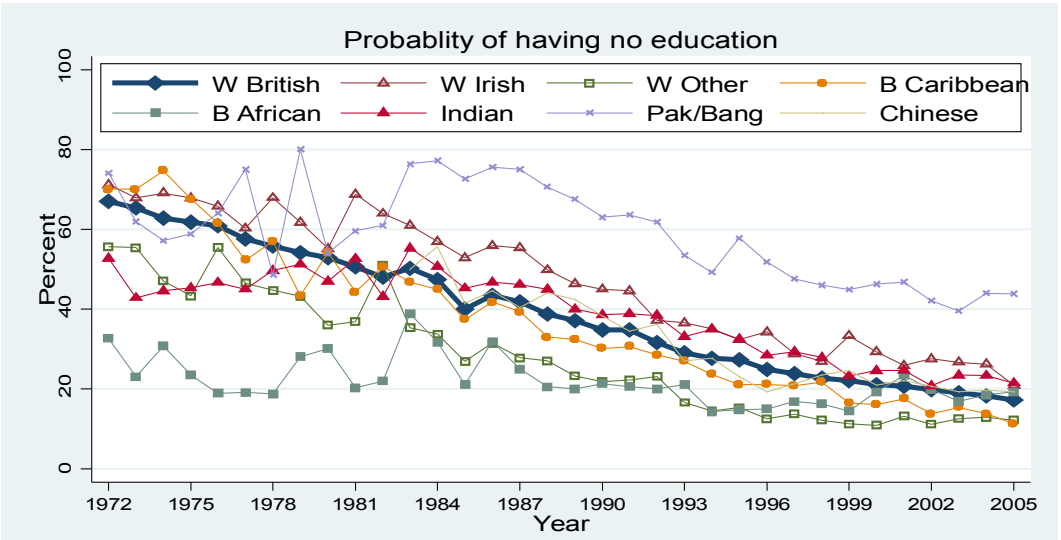


Figure 1: Educational qualifications for men (16-64) in Britain.







Note: Data for Chinese not presented before 1983 due to small samples.

Source: Pooled data of GHS/LFS (1972-2005).

Figure 2: Educational qualifications for women (16-59) in Britain.

MINORITY ETHNIC GROUPS IN BRITISH LABOUR MARKET (1972-2005)
Exploring patterns, trends and processes of minority ethnic disadvantages

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Anthony Heath, Oxford University

Background
Britain is becoming increasingly multi-ethnic, with the proportion of minority ethnic groups in the population growing by two fold in the last fifty years. Much research shows that the minority ethnic groups face various disadvantages in the labour market and in other aspects of social life. Yet most of the research is based on qualitative or snap-shot data, unable to explore such disadvantages in their patterns, trends and processes.

This ESRC project aims to conduct a systematic and rigorous analysis in this regard. We pooled together over 100 datasets from the most authoritative government surveys with around 5 million records including about 145,000 respondents from minority ethnic groups.

Main findings
Our research findings have been presented at various conferences and reported in the national media and academic journals. The following is a brief summary (see Li and Heath 2007a, b for further details).

- The White British were generally found to be advantaged in terms of gaining access to the labour market and in avoidance of unemployment in the period covered;
- There were more differences among the minority ethnic groups than between them and the majority group in terms of employment, access to the salariat (professional/managerial positions) or income from paid work;
- Black and Pakistani/Bangladeshi groups were most likely to bear the brunt of economic recession, with around 20 per cent being unemployment in the mid 1980s and in the early 1990s, confirming the thesis of 'hyper-cyclical' ethnic unemployment
- 1st generation Black groups had similar employment rates to the 2nd generation but 1st generation Pakistani/Bangladeshi groups were much less likely to be employed than the 2nd generation and were less than half as likely to have a job as the White British;
- Most women of Pakistani/Bangladeshi heritage were economically inactive throughout the period covered (around 60 per cent each year);
- With regard to access to the salariat, White Other men (from Australia, New Zealand, US, Canada and Europe) were found most likely to be incumbent in such positions whereas Black African, and particularly Pakistani/Bangladeshi men were least likely to be found in such positions;
- White Irish men were more likely to be doing manual jobs than White British peers in the earlier half of the period but since the early 1990s have caught up with the latter in gaining access to the salariat;
- In the last decade Pakistani/Bangladeshi men have surpassed the Chinese in self-employment, possibly as an 'escape strategy';
- Black Caribbean men significantly improved their chances of gaining access to the salariat in the middle and the later period as compared with the earlier period, yet the same was not found for Black African men;
- 2nd generation men of Black Caribbean, Indian and Pakistani/Bangladeshi origins significantly improved their likelihood of gaining access to the salariat as compared with the 1st generation, and the same was found for Indian and Pakistani/Bangladeshi women.

Why studying ethnic disadvantages?
Improving the socio-economic conditions of the minority ethnic groups by reducing ethnic penalty and ensuring equal access

to employment and upward social mobility is a top priority for the government and for the society as a whole. This priority is set within the context of the ageing population for the White British and the numerical growths of the minority ethnic groups in the years to come. Thus, understanding patterns, trends and processes of minority ethnic disadvantages in the labour market is not only concerned with issues of social justice and civic liberty, but with the future economic prosperity of all members in the society, and with the future status of the country as a major player in an increasingly globalised economy.

Theoretical perspectives

There are two prominent approaches to the study of minority ethnic disadvantages: 'human capital' and 'social capital'. The former emphasises the role of education, training, labour market experience and language proficiency while the latter stresses the benefits accruing from formal and informal social networks in job search, especially from bridging social capital in gaining access to the mainstream labour market and upward social mobility. It is, however, worth noting that the two approaches are complementary rather than mutually exclusive. People with higher levels of human capital tend to have more social capital. Minority ethnic groups tend to have lower levels of both human and social capital. This, coupled with prejudice and discrimination from employers, may have an important adverse impact on the labour market aspiration, participation and upward mobility of the minority ethnic groups.

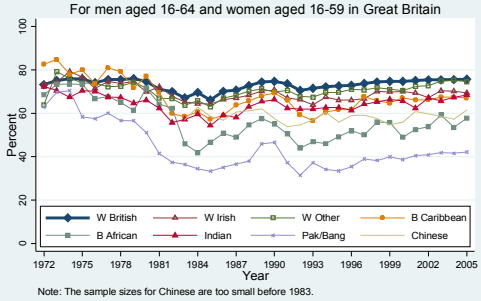
Data and methods used in the study

We drew data from the General Household Survey and the Labour Force Survey from 1972 to the most recent, standardising the key variables on ethnicity, employment, class, education, marital and generation statuses, income etc. We used descriptive methods to show patterns and trends in the labour market situation, particularly in employment and class attainment, and multivariate modelling techniques on access to employment and to the salariat, and on income. We also used some fairly advanced techniques such as Propensity Score Matching (PSM) to study income, and decomposition methods to access the contributions of demographic and socio-cultural factors to the observed gaps in employment rates between the majority and the minority groups. For some research purposes, we also used data from other sources such as the Samples of Anonymised Records (SAR) from the 2001 Census and the Home Office Citizenship Survey (HOCS 2003/05).

Further evidence of minority ethnic disadvantages

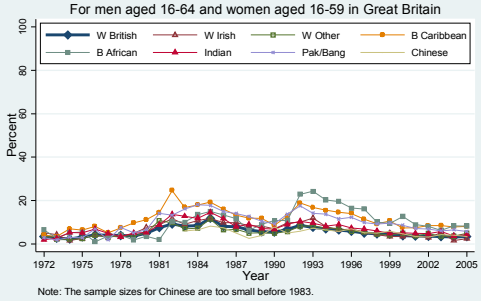
As the summary above was mainly on gender, period and generational effects among the minority ethnic groups, we present some further evidence below on minority ethnic disadvantages combining data for the two gender groups.

Figure 1: Probability of employment by ethnic groups
For men aged 16-64 and women aged 16-59 in Great Britain



Note: The sample sizes for Chinese are too small before 1983.
Source: Pooled data of GHS/LFS (1972-2005).

Figure 2: Probability of unemployment by ethnic groups
For men aged 16-64 and women aged 16-59 in Great Britain

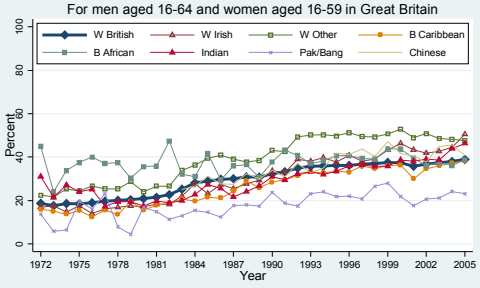


Note: The sample sizes for Chinese are too small before 1983.
Source: Pooled data of GHS/LFS (1972-2005).

The data in Figures 1 & 2 show clearly that White groups were on the whole most likely to be found in employment and least likely to be in unemployment in the entire period covered. With regard to patterns for the Pakistani/Bangladeshi groups, one can see that their employment rates were the lowest amongst all ethnic groups but were particularly low since the early 1980s onwards. This is probably due to the fact

that in the earlier period, men came to establish a foothold and their employment rates, albeit lower than other groups, were not that low. Gradually they brought their wives here who tend to stay at home looking after children. This lowered their overall participation rates and affected their economic situation. Black Africans were from diverse origins and were much less likely to be employed than the other groups (except Pakistani/Bangladeshi groups where women in the majority were economically inactive). Another point to note is that while the economic recession in much of the 1980s hit Black Caribbean, Pakistani/Bangladeshi origins more than other groups, it was the Black Africans who bore the brunt of unemployment in the early 1990s.

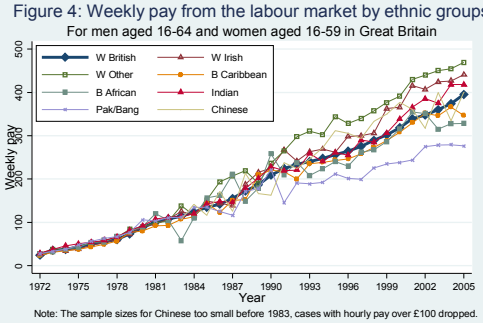
Figure 3: Probability of being in the salariat by ethnic groups
For men aged 16-64 and women aged 16-59 in Great Britain



Note: The sample sizes for Chinese are too small before 1983.
Source: Pooled data of GHS/LFS (1972-2005).

The data in Figure 3 shows that rates in salariat positions for the Black Africans levelled to those of the White British. White Others were consistently most likely to find themselves in such positions. White Irish, Indians, Chinese and Black Caribbean groups improved their access to the salariat relative to the White British. The Pakistani/Bangladeshi groups showed little sign of improvement in this regard.

Figure 4: Weekly pay from the labour market by ethnic groups
For men aged 16-64 and women aged 16-59 in Great Britain



Note: The sample sizes for Chinese too small before 1983, cases with hourly pay over £100 dropped.
Source: Pooled data of GHS/LFS (1972-2005).

The income situation as shown in Figure 4 shows trends of polarisation with White Other and White Irish earning more than the other groups; Indian, Chinese and two Black groups close to the White British and the Pakistani/Bangladeshi groups being increasingly left behind.

Table 1: Self-employment (SE), work-force size (>25), salariat (P&M) and sector

	% self-empl.	% among the self-employed >25	P&M	H/C	Know-ledge
W Brit	9.6	4.0	24.8	4.5	12.0
W Irish	10.9	6.0	32.3	5.4	13.8
W Oth	11.0	4.7	41.1	10.0	17.4
B Carib	5.4	5.3	26.4	2.2	17.7
B Afric	6.0	10.5	47.5	2.2	17.7
Indian	12.0	4.6	30.1	5.1	14.9
Pak/Ban	9.4	5.3	17.4	15.1	7.3
Chinese	17.3	1.2	15.8	60.2	7.5

Note:
1. For men aged 16-64 and women aged 16-59 in Great Britain, excluding full-time student.
2. H/C refers to hotel/catering sector and knowledge to finance, health, education and public administration sector.

Source: The 3% 2001 SAR.

As there is little detailed exploration of self-employment in existing literature, we provide some evidence (Table 1). The Chinese were most likely to engage in self-employment (17 per cent), but the self-employed among the group were, as compared with their peers in the other groups, least likely to be big employers, to work as professionals or managers, or to be in the knowledge sectors. Actually, most of them (60 per cent) were working in restaurants or take-aways. By contrast, Black Africans, although unlikely to be self-employed, were most likely to be big employers, to work as professionals or managers, or to engage in the knowledge sector for those amongst them who do become entrepreneurial.

Table 2: Decomposing the unemployment gaps between minority and White groups

	% ILO unemp.	% of the gap explained by the models M1	M2	M3	M4	% of gap resid.
W B	*3.7*					

B C	10.9***	2.2	3.8	9.9	18.0	66.1
B A	11.4***	1.9	5.5	5.9	15.0	71.3
Indn	8.0***	4.6	7.2	6.2	-	82.0
P/B	11.4***	20.3	8.2	3.9	0.8	66.8
Chns	6.9*	18.4	4.6	15.3	6.9	54.8

Note:

1. Unemployment rate for each ethnic group is compared with White British, with *p<0.05; **p<0.01 and *** p<0.001.
2. Model 1 = human capital (education, age, age squared); Model 2 = M1 + social capital (friends in same ethnicity, BME interaction); Model 3 = M2 + job refusal; Model 4 = M3 + personal/contextual characteristics (gender, marital status, number of dependant children and region.
3. For men aged 16-64 and women aged 16-59 in England and Wales.

Source: The HOCS (2003/05).

Finally, we present some information on the unemployment gap between the White and the minority ethnic groups and on the 'contributions' by various (groups of) factors to explaining the gaps (see also Lindley, Dale and Dex, 2006). The data are drawn from the HOCS (2003/05).

3.7 per cent of the Whites were jobless but the rates for all other ethnic groups were significantly higher, around 11 per cent for the Black and the Pakistani/Bangladeshi groups, and around 7 to 8 per cent for the Indians and the Chinese. The differences between the minority and the majority groups in terms of unemployment rates constitute the 'gaps' to be explained.

Using the 'Fairlie' decomposition method (see Fairlie, 2005), we can work out the percentages of the gaps explained by the various factors. We subsumed the factors under four headings: human capital, social capital, job refusal and personal/contextual attributes (see Notes to Table 4 for details of the variables included in each set).

The data in Table 2 show that human capital differences explained 20 per cent of the unemployment differential between the Pakistani/Bangladeshi and the White groups, and 18 per cent for the Chinese. Further analysis shows that the Chinese were actually much more likely to have degree level qualifications but less likely to have vocational qualifications than the White British. As for social capital, we find that the greatest variances explained were for the two South Asian groups, 8 and 7 per cent respectively. It is interesting to note that direct job refusal accounts for 15 per cent of the Chinese gap and 10 per cent of the gap for the Black Caribbean. As the two Black groups in the dataset were more likely to be female (around 60 per cent as compared with 53 per cent for the sample) and less likely to be partnered (around one third as against 57 per cent for the sample), one finds that personal factors account more for their gaps than for the other groups.

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