### ORIGINAL PAPER

# Change and continuity among minority communities in Britain

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Received: 20 May 2008 / Accepted: 14 September 2009 /

Published online: 7 November 2009

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**Abstract** We compare the Pakistani and Bangladeshi communities in Britain with other ethnic minorities to ask the questions 'are Muslims different?' and 'is their behaviour changing over time?'. We look at the gender gap in education, age at marriage, marriage from the source country and female employment. In all these dimensions we find that Muslim communities are different but also that there is a convergence in behaviour. This is because those born in Britain generally differ markedly in behaviours from those born in the country of origin, but also because there is change within both the UK- and foreignborn communities.

**Keywords** Immigration · Assimilation

JEL Classification J15 • F22

#### 1 Introduction

There is currently widespread concern, even alarm, that some ethnic minorities in the UK, predominantly Muslim, are not following the stereotypical immigrant path of economic and cultural assimilation into mainstream society.

Responsible editor: Klaus F. Zimmermann

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There is a very widespread popular belief that Muslims are 'different' (and a small academic literature—see, for example, Constant and Zimmermann 2008 and Bisin et al. 2008). Many also believe that the differences between Muslims and non-Muslims are growing over time (see the examples documented in Ruthven 2002 and Poole 2002) as the ideas of radical Islam have a growing influence. For example, the final report of the Commission for Racial Equality (2007, p4) wrote that "extremism both political and religious is on the rise as people become disillusioned and disconnected from each other".

In this paper we have a modest aim—to seek to document the ways in which Muslims in Britain differ from other communities and how these differences are evolving over time. To do this, we compare the Pakistani and Bangladeshi communities in Britain (who are 97% Muslim and are 55% of all Muslims in Britain) with three other large ethnic minority communities—Indians, Black Caribbeans and Chinese. We study a number of different dimensions of behaviour chosen to be both measurable and to capture important aspects of the ways in which Muslims are perceived to be 'different'—we consider the gender gap in education (it often being alleged that less importance is attached to girls' education), marriage patterns, fertility and female employment.

The plan of the paper is as follows. The next section summarises very briefly the voluminous existing literature on the economic and social circumstances of ethnic minorities in Britain. However, most (though not all) of this literature focuses on snapshots of differences at a point in time—there is much less in the way of research into changes over time and this is the main focus of our paper. The second section provides details about the data used in our analysis and presents some descriptive statistics as background for our findings in subsequent sections. The third section studies the gender gap in educational attainment, a measure chosen to reflect the alleged lower priority given to the welfare of women. The fourth section then studies marriage patterns, with information on age of marriage and marriage from the source country. The fifth section then focuses on fertility and the sixth on employment rates of women. In all of these areas we do find that Pakistanis and Bangladeshis are 'different' in ways that are in line with the of popular perception—women have less education than men, they marry young, have a high propensity to take spouses from the country of origin, have more children and low female employment rates. But, we also find evidence of marked change in all these

<sup>&</sup>lt;sup>2</sup>To give but one example, the Daily Telegraph of January 20, 2006 contained an article with the statement "the findings depict a Muslim community becoming more radical and feeling more alienated from mainstream society". Lurid tales of forced marriage, honour killings and hate-filled religious literature within these communities spilling out into rioting (in 1989, 2001 and 2005) and recent terrorist plots lead to a less than flattering image of British Muslim communities amongst many non-Muslims. Though these events are real enough, they are also rare.



<sup>&</sup>lt;sup>1</sup>The studies of the identity is also relevant here—see Zimmermann et al. (2007), Constant et al. (2006) and Manning and Roy (2010) for evidence about the determinants of identity among immigrants and ethnic minorities. Constant and Zimmermann (2008) also provide evidence on the link between identity and outcomes.

areas and this change is always in the direction of the behaviour of the other ethnic minorities and the indigenous British population (a conclusion in line with the more general thesis about global trends put forward by Courbage and Todd 2007). This is partly because the behaviour of those born in the UK is very different from those born in the country of origin, but also because there are generational changes among both the UK-born and foreign-born. The final section of the paper shows that all of these changes are occurring within communities who continue to define themselves as resolutely Muslim—it is not associated with rising secularism, although there are very modest changes towards fewer practising their religion.

# 2 Existing literature

There is a vast amount of research on the ways in which the economic and social circumstances of ethnic minorities in Britain differ from that of the indigenous white population.<sup>3</sup> The earliest papers on economic outcomes (most commonly measured as earnings, employment and unemployment) were probably Chiswick (1980) and Stewart (1983). Since then, there have been many studies, considering diversity in the ethnic minority experience (see Blackaby et al. 1997; Modood et al. 1997; Clark and Drinkwater 2007; Elliott and Lindley 2008 inter alia), the difference between first- and second-generation immigrants (e.g. Blackaby et al. 2002, 2005), the importance of language fluency (Leslie and Lindley 2001; Lindley 2002b; Dustmann and Fabbri 2003), rates of assimilation (Bell 1997; Clark and Lindley 2006), the role of religion as opposed to ethnicity (Lindley 2002a) and differences in time-use (Zaiceva and Zimmermann 2007). These studies have given us excellent snapshots of the position of different ethnic minorities. In particular, earnings and employment penalties are typically found to be largest for the Pakistanis and Bangladeshis who are among the most economically disadvantaged groups in British society.

But, there is much less in the way of research into how this is changing over time. This is probably due to the fact that many ethnic minority populations in Britain are of relatively recent origin so that, until very recently, it has been hard to say anything very precise about trends. But there are a number of recent studies that do explicitly address the question of changes over time. Lindley et al. (2006) investigate how women's employment rates among ethnic minorities have been changing, paying particular attention to the changing role of education. Clark and Drinkwater (2007) compare data from the 1991 and 2001 censuses, looking at the way in which employment and unemployment rates have changed for different ethnic minorities. They find little change in the gap in employment rates between Pakistanis and Bangladeshis on the one hand and whites on the other. Similar persistence in employment disadvantage

<sup>&</sup>lt;sup>3</sup>There is also an enormous literature which we do not seek to summarise here on other countries—see Adsera and Chiswick (2007) for an interesting comparison of European countries.



is found in Berthoud and Blekesaune (2007) using General Household Survey data from 1974 to 2003.

An impression one gets from these studies of change is that the Pakistanis and the Bangladeshis are insular, peculiarly resistant to change and different from other ethnic minority communities. This view is not new—for example, a book on the main ethnic minorities in Britain analysing data from the 1991 census (Peach 1996) used the following chapter titles to summarise each of the main ethnic minority communities:

- Black Caribbeans: class, gender and geography.
- The Indians: onward and upward
- Pakistanis: stability and introspection
- Bangladeshis: the encapsulated community
- Chinese: upwardly mobile

It is clear that the image presented of Pakistanis and Bangladeshis is of communities much less dynamic than the Indians and Chinese. And the recent Equalities Review (Cabinet Office 2007), concluded that employment rates among Pakistani and Bangladeshi women will never be the same as among white women, a startlingly strong statement.

This paper is concerned with whether this picture of lack of dynamism is accurate. We consider a number of different aspects of economic and social life chosen to be both measurable and to capture some of the main ways (though we make no claim to be exhaustive) in which the Muslim communities are thought to be 'different'—the gender gap in education, marriage and fertility and female employment.<sup>4</sup> We document the extent to which these groups are different and the extent to which this has changed over time. To evaluate the extent of difference we need a benchmark. In this paper we primarily compare Pakistanis and Bangladeshis to the other large ethnic minorities in Britain— Indians,<sup>5</sup> Black Caribbeans and Chinese—but the other obvious alternative is to the white British population. We choose the other ethnic minorities as a comparison because their experience is more likely to be comparable but our qualitative conclusions would be much the same if we used an alternative benchmark. To evaluate the extent of change, the existing literature tends to estimate repeated cross-sections but we take a different approach. Because many of the outcome variables we consider are largely lifetime decisions and

<sup>&</sup>lt;sup>5</sup>About 12% of the Indians in the UK are Muslim but, because a religion question is only asked in the Labour Force Survey since 2002, we cannot conduct our analysis restricting the Indian sample to non-Muslims. What analysis we have done, does suggest an effect of religion within the Indian community with Muslims and Sikhs being more 'traditional' in their practices. But as the Muslims are only a small minority of Indians, it must be the behaviour of non-Muslims that accounts of most of what we see in the Indian community.



<sup>&</sup>lt;sup>4</sup>There are other interesting dimensions along which Muslims might be different that we do not study. For example, in the course of this research we also used the British Social Attitudes Survey to investigate attitudes to women's rights and homosexuality. We did find Muslims are markedly more hostile to homosexuality though all religious people are more hostile than those without a religion. However, small sample sizes meant we could not say anything about changes over time.

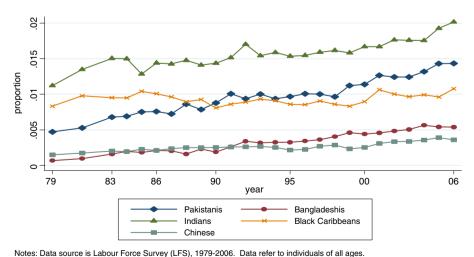
attitudes (e.g. education, marriage and fertility) we focus on estimating cohort effects—whether later generations differ substantially from older generations. In addition, we often look at the difference in behaviour among the UK- and foreign-born, an issue that receives surprisingly little attention in much of the existing literature, given the sizeable differences in behaviour we document in this paper.

# 3 Data and background

The main data used in this paper comes from the Labour Force Survey (LFS). This was conducted every 2 years from 1975 to 1983, then annually until 1992 and quarterly since that date. Information on ethnicity at a level of disaggregation suitable for our purposes is only available since 1979 so that our sample period is 1979–2006. Ethnicity is self-defined but the possible answers have a large number of 'mixed' categories so that, for example, the children of interracial marriage would generally be able to find a category suitable for their situation.

We start with some simple descriptive statistics. In this paper we focus primarily on a comparison of the Pakistani and Bangladeshi community with Indians, Black Caribbeans and Chinese, the other large ethnic minorities in the UK. Figure 1 shows how the proportions of these ethnic minorities in the total population have changed over time.

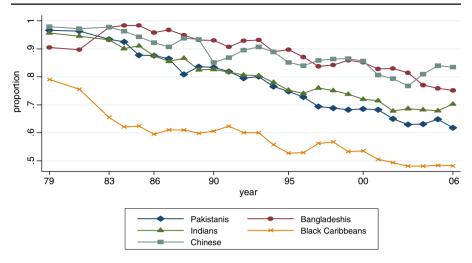
Indians are the largest group representing 2% of the total population in 2006, followed by Pakistanis at 1.5%, Black Caribbeans at 1% and Chinese and Bangladeshis at 0.5%. All of the ethnic groups from the Indian sub-continent



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Fig. 1 The changing sizes of ethnic minority communities in the UK





Notes: Data source is Labour Force Survey (LFS),1979-2006. Data refer to population aged 16 or over.

Fig. 2 The proportion of adults who are foreign-born

have grown in size over the past 25 years while the size of the Black Caribbean community has hardly changed.<sup>6</sup>

The different time profiles of the different communities largely reflect the fact that they arrived in the UK at different times, something that also shows up in the proportion of each community that is UK-born. Figure 2 shows how the fraction of adults in each ethnic minority that is foreign-born has changed over time.

This shows that Black Caribbeans have the highest fraction of UK-born, reflecting the fact that their immigration into the UK began earliest (in the 1950s). Then are Pakistanis and Indians<sup>7</sup> who began to arrive in large numbers in the 1960s. The Bangladeshi and Chinese communities are more recent so they have the lowest proportion of UK-born among adults. For all ethnic minorities the fraction of UK-born is rising—the only exceptions to this are the Chinese and Indians in recent years.

For those adults who are foreign-born, Fig. 3 shows the average time since arrival in the UK.

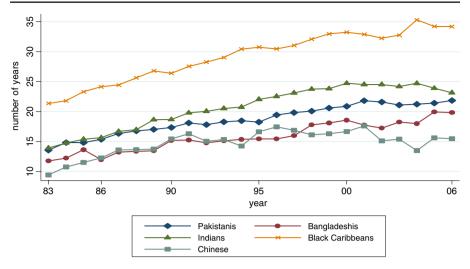
This is rising for all groups with the exception of Chinese and Indians in recent years. The fact that none of these lines rise 1 year at a time shows there is continued immigration. But the bottom line is that Figs. 2 and 3 show that the

<sup>&</sup>lt;sup>7</sup>This is the case for adults only whereas if one considers also children then Bangladeshis have the third highest proportion of UK-born.



<sup>&</sup>lt;sup>6</sup>This growth will almost certainly continue into the future as many of the ethnic minorities have a much younger age structure—according to the 2001 Census just under 12% of Pakistanis and over 12% of Bangladeshis were aged under four in 2001 compared to under 6% of the white population.

<sup>7</sup>This is the case for adults only whereas if one considers also children then Bangladeshis have the



Notes: Data source is Labour Force Survey (LFS), 1983-2006. Data refer to population aged 16 or over. Years of arrival only asked in LFS since 1983.

Fig. 3 The average number of years since arrival for the foreign-born

ethnic minority communities are changing, with the population having weaker links with the countries of origin and closer links to the UK.

However, the interesting question is whether the behaviours of these communities are changing as the communities become more distant from the country of origin. We now turn to this question.

### 4 The gender gap in education

One of the main ways in which the predominantly Muslim ethnic minority communities are thought to be very different from the other ethnic minorities and the indigenous UK population is in attitudes towards gender equality. One way of looking for evidence of this is to compare the educational attainment of men and women. Table 1 shows that there is a sizeable gender gap in average age left full-time education among the Pakistani and Bangladeshi populations in 2006 of 2.2 years, a gap larger than that found amongst the other main ethnic minority groups—the gender gap among Indians and Chinese is about 1 year.<sup>8</sup>

More striking still is the proportion of men and women who have left fulltime education by the age of 13. Table 1 shows that 12% of Pakistani and 16%

<sup>&</sup>lt;sup>8</sup>For the UK-born white population the gender gap in age left full-time education is about 0.15 years for those born prior to 1960 and zero thereafter.



	Average ag education in	e left full-time n 2006	Proportion of people who left full-time education by the age of 13 in 2006	
	Men	Women	Men	Women
Pakistani	18.3	16.11	0.038	0.12
Bangladeshi	17.48	15.3	0.047	0.16
Indian	19.73	18.82	0.023	0.035
Black Caribbean	17.26	17.41	0.013	0.01
Chinese	20.64	19.84	0.012	0.018

**Table 1** Average age left full-time education and proportion left full-time education by the age of 13 for men and women by ethnicity in 2006

Data source is Labour Force Survey (LFS), 2006, sample includes those aged 26 or over

of Bangladeshi women are in this category, a much higher proportion than among other ethnic minorities and much higher than the men in their communities. Table 1 also shows that Pakistanis and Bangladeshis, both men and women, have significantly less education than Indians and Chinese, a fact that needs to be borne in mind when considering their economic disadvantage.

But, Table 1 is simply a snapshot at a point in time and says nothing about the extent and pace of change. There are a number of possible reasons to expect to see change over time. First, there are quite likely to be differences in educational attainment between the UK- and foreign-born. For example, it should not be possible for those born and bred in the UK to leave education by the age of 13 while this remains possible in Pakistan and Bangladesh. As the communities mature and the fraction of UK-born rises, this will tend to raise the level of educational attainment and reduce the gender gap. But it is likely that there are also changes over time both among the UK- and foreignborn. For example, the education system is changing quite rapidly within both Pakistan and Bangladesh.

The large gender gap in education in Pakistan has been noted previously (see Aslam and Kingdon 2007) but has been falling. For example, the 2005/2006 Pakistani Social and Living Standards Measurement Survey<sup>10</sup> shows that among those living in rural areas (the origin of most Pakistani immigrants to the UK), only 2% of women aged 60+ had ever attended school compared to 26% of men. For those aged 10–14 years 33% of women have attended school compared to 61% of men. Bangladesh has seen even more dramatic change having already met its Millennium Development Goal of gender parity in primary and secondary school enrolment rates—it is now often singled out by the World Bank as a model of how to set about doing this. So, there is substantial change within both Pakistan and Bangladesh to reduce the gender gap in education and this is likely to have an effect on the immigrants from those countries into Britain.

<sup>&</sup>lt;sup>10</sup>Available at http://www.statpak.gov.pk/depts/fbs/statistics/pslm2005\_06/2.2.pdf.



 $<sup>^9</sup>$ However, it is possible for someone to be UK-born, then move to Pakistan/Bangladesh, leave education early and later return to the UK.

Table 2 presents estimates of the gender gap in education for the main ethnic minorities for different birth cohorts for the foreign- and UK-born to provide a clearer picture of these trends.

We try to maintain a consistent structure for our regression models across all our outcome variables so we will describe this approach here. We are interested in the effects of cohort and of being foreign-born so we typically include as controls dummy variables for broad birth cohort, separately for both the UK- and foreign-born. Because there are very few individuals in our sample communities who were born in the UK in the early years we only report estimates for two British-born cohorts—those born before and after 1970—whereas for the foreign-born we report more. Our empirical specifications are simple but we believe they capture some important aspects of what is happening. They do not intend to capture all potentially important differences e.g. age of arrival and/or time since arrival in the UK might be an important determinant of outcomes for the foreign-born. However our relatively small sample sizes and limited data availability for the earlier years mean that we lose a lot of precision if we attempt a much richer analysis.

The main features that stand out from Table 2 are that the gender gaps in education are largest among the Pakistanis and Bangladeshis (though not zero for the Indians and foreign-born Chinese) and very dramatic for those born prior to 1950. However, one also sees evidence of change—there are lower gaps among the UK-born and falling gaps among the foreign-born. For the latest birth cohorts, the gender gap in education is still largest for the Pakistanis and Bangladeshis but the gap with the Indians is no longer what it once was. Although the gender gap remains largest for Pakistanis and Bangladeshis it is now relatively small.

To summarise: the gender gap in educational attainment is larger among Pakistani and Bangladeshi communities than for the other main ethnic minorities. In large part, this is the result of enormous past differences in the educational attainment of men and women in the countries of origin. But there is

	Pakistani	Bangladeshi	Indian	Black Caribbean	Chinese
UK-born					
Born before 1970	1.55 <sup>a</sup> (0.13)	1.41 <sup>b</sup> (0.65)	$0.7^{a}(0.07)$	$-0.24^{a}$ (0.03)	-0.16(0.27)
Born after 1970	1.08a (0.13)	$0.72^{b}(0.34)$	$0.66^{a}(0.09)$	0.09 (0.11)	-0.43(0.33)
Foreign-born					
Born before 1940	6.93 <sup>a</sup> (0.33)	4.92 <sup>a</sup> (0.62)	3.94 <sup>a</sup> (0.16)	$0.43^{a}$ (0.06)	1.47 <sup>a</sup> (0.51)
Born in 1940s	5.54 <sup>a</sup> (0.2)	4.98a (0.36)	2.26a (0.08)	$-0.22^{a}$ (0.06)	$0.85^{a}$ (0.85)
Born in 1950s	3.69 <sup>a</sup> (0.12)	3.73 <sup>a</sup> (0.23)	$1.46^{a} (0.05)$	-0.06(0.05)	$0.99^a$ (0.14)
Born in 1960s	$3.54^{a}$ (0.11)	2.48 <sup>a</sup> (0.16)	$1.28^{a} (0.06)$	0.04(0.1)	$0.93^{a}$ (0.14)
Born after 1970	2.13 <sup>a</sup> (0.15)	1.49 <sup>a</sup> (0.17)	$1.00^{a} (0.11)$	$-0.53^{b}$ (0.21)	$0.98^{a}$ (0.23)
Observations	36,171	11,294	74,178	41,658	12,815

**Table 2** The gender gap in age left full-time education for different birth cohorts

Data source is Labour Force Survey (LFS), 1979–2006, sample includes those aged 26 or over, robust standard errors in parentheses



<sup>&</sup>lt;sup>a</sup>Significant at 1%

<sup>&</sup>lt;sup>b</sup>Significant at 5%

very rapid change, driven in part by changes among both the UK- and foreign-born<sup>11</sup> and in part because of the change in the share of the communities who are UK-born. Our conclusions here are consistent with those of more qualitative studies (e.g. Ahmad et al. 2003) who conclude that cultures often portrayed as opposed to the education and employment of women seem to be producing growing cohorts of highly motivated young women.

# 5 Marriage

It is known that South Asian communities in general, and Bangladeshi and Pakistani communities in particular, tend to get married young, often to spouses from the country of origin, <sup>12</sup> (see, for example, Modood et al. 1997, or Berthoud 2005). In this section, we examine trends in some of these outcomes to consider the extent of change.

## 5.1 Marriage rates at age 25

As a single summary measure of the tendency to marry, we use the fraction of the women aged 18–25 inclusive who are married or co-habiting. This measure is chosen because it is among this age group that the differences in marriage rates across ethnic minorities seem to be largest. It is natural to try to relate this generational change to a growing fraction who are UK-born and to rising education among women, both factors likely to be associated with later marriage. To investigate this further, the first panel of Table 3 reports the results of regressions in which the sample is women aged 18–25, the dependent variable is a dummy variable for being married and we include as controls age, birth cohort and whether the respondent was born in the UK.

The first row shows the estimated marriage rate for a woman aged 25 who is born in the UK in 1970 or after. This shows that marriage rates are highest amongst Pakistanis and Bangladeshis at approximately 50% <sup>15</sup> but not much lower among Indians—45%. Marriage rates are considerably lower among the Chinese and much lower among Black Caribbeans. The bottom half of the table then reports estimates of deviations in marriage rates from the base group

<sup>&</sup>lt;sup>15</sup>It is worth noting that very early marriage remains extremely common in many parts of rural Bangladesh (see Field and Ambrus 2008) where it is seen as something of a 'problem' that policy is trying to address.



<sup>&</sup>lt;sup>11</sup>Changes among the foreign-born might be the result of the changes in the source countries discussed above but another factor that might be important is the changing selection of immigrants into the UK.

 $<sup>^{12}</sup>$ Some of these practises have been the subject of UK legislation to restrict the entry of spouses below the age of 18 and to impose a requirement that the prospective spouses have previously met.

<sup>&</sup>lt;sup>13</sup>We have experimented with using different age groups and with including men but with very similar results. Some other tables are available from the authors on request.

<sup>&</sup>lt;sup>14</sup>We also estimated similar models for men for whom the results are similar though less striking as they tend to marry later. In the interest of brevity we do not report those estimates here.

Table 3 Results of regressions

	Pakistani	Bangladeshi	Indian	Black Caribbean	Chinese
Panel A: Probability of being married for females aged between 18 and 25 Base group: $0.52^a \ (0.01)$	iles aged between $18$ and $25$ $0.52^a$ $(0.01)$	$0.5^{a}$ $(0.02)$	$0.45^{a}$ (0.01)	$0.18^{a}$ $(0.001)$	$0.39^{a}$ (0.003)
UK-born, aged 25, being born after 1970 Deviation from base group					
UK-born Born before 1970	$0.11^{a}$ (0.02)	0.16 (0.09)	$0.16^{a}$ $(0.01)$	$0.027^{\rm a}$ (0.009)	-0.07 (0.09)
Foreign-born Born before 1970s	$0.36^{a}$ (0.01)	$0.43^{\mathrm{a}} (0.03)$	$0.31^{a}$ (0.01)	$0.15^{a}(0.02)$	$0.13^{a}$ (0.03)
Born after 1970 Observations	$0.3^{a}$ (0.01) 7,281	$0.33^{a}$ (0.02) 2,596	$0.26^{a}$ (0.01) $9,241$	$0.17^{a} (0.02)$ 5,205	0.017 (0.02) 1,944
Panel B: Probability of being married for females aged between 18 and 25-controlling for education	iles aged between 18 and 25-c	ontrolling for education			
Base group: UK-born, aged 25, left FT	$0.61^{\mathrm{a}}\ (0.01)$	$0.56^{\mathrm{a}}(0.03)$	$0.62^{a}$ (0.02)	$0.19^{a}$ $(0.01)$	$0.5^{a}$ (0.05)
education at 16, being born after 1970					
Effect of age	$-0.03^{\mathrm{a}}$ (0.004)	$-0.05^{a}$ (0.01)	$-0.05^{a}$ (0.004)	-0.003 (0.002)	$-0.02^{a}$ (0.009)
Deviation from base group					
Born before 1970	0.033 (0.03)	0.11 (0.09)	$0.09^{a}$ (0.02)	$0.03^{a}$ (0.01)	-0.11(0.08)
Foreign-born Born before 1970s	$0.24^{a}$ (0.02)	$0.34^{a}$ (0.04)	$0.2^{a} (0.02)$	$0.18^{a} (0.02)$	$0.2^{a} (0.05)$
Born after 1970	$0.23^{a}$ (0.01)	$0.28^{a}$ (0.02)	$0.24^{a}$ (0.02)	$0.26^{a}$ (0.03)	$0.13^{a}$ (0.05)
Foreign-born $\times$ education	$0.023^{a}$ (0.004)	$0.03^{b}$ (0.01)	$0.02^{a} (0.005)$	-0.03(0.009)	-0.01(0.01)
Observations	5,580	2,096	6,198	4,211	861
Data course is Lahour Force Survey (I FS) 1070-2006 cample includes famalas and hatween 18 and 25 inclusive. A linear archability model is estimated and	(I FS) 1079_2006 sample inc	inder females and between	an 18 and 25 inclusive	i lebom whilidedone reedil A	is actimated age

Data source is Labour Force Survey (LFS), 1979-2006, sample includes females aged between 18 and 25 inclusive. A linear probability model is estimated, age and age squared are also included as controls, robust standard errors in parentheses <sup>a</sup>Significant at 1% <sup>b</sup>Significant at 5%



for different birth cohorts, UK- and foreign-born. One sees higher marriage rates among the foreign-born and those born earlier so that there is evidence here that marriage rates are falling for both the foreign- and UK-born groups. Indians are very similar in all dimensions to Pakistanis and Bangladeshis, though the generational change is much less marked for Black Caribbeans and the Chinese (a finding in line with the analysis of Berthoud 2005).

One of the factors that may lie behind declining marriage rates is the rising education we saw in the previous section. Accordingly, Panel B of Table 3 reports the probability of being married for females aged between 18 and 25—controlling for education, is similar to probability of being married for females aged between 18 and 25 but now includes years of education as an extra control. We also allow education to have potentially different effects for the UK and foreign-born.

For all ethnic groups more education is associated with later marriage but the effect is larger for the British-born—a British-born Bangladeshi woman with a degree is estimated to be something like 25% less likely to be married at age 25 than one who left school at 16. The estimated effect of education is similar for all the South Asian groups but smaller for the Chinese and smallest for Black Caribbeans. The effects of birth cohort are still present in Table 3, probability of being married for females aged between 18 and 25—controlling for education, though reduced in magnitude compared to those reported in probability of being married for females aged between 18 and 25 as one would expect given that education is higher for later generations.

Hence, although there are very significant differences in age of marriage across the different ethnic minority communities, there is marked convergence in behaviour.

# 5.2 Marriage from the source country

The propensity to marry someone from the country of origin is interesting for a number of reasons. First, the greater the extent of this practice the faster the rate of growth of the community as the immigration of a spouse increases the size of the community. Secondly it means that the fraction foreign-born in these communities will not fall as fast as it otherwise would. As we have already seen the UK-born and foreign-born differ along a number of dimensions (e.g. education and marriage) so that this practice will also prolong the differences between these communities and others in the UK.

To investigate the extent of this practice we divide the ethnic minority population into those born in the UK or who came before the age of 16 on the one hand (i.e. all those who arrived in the UK before they were of legally marriageable age) and those who came after the age of 16 on the other. Table 4

<sup>&</sup>lt;sup>16</sup>There is a tricky causality issue here—it may be that later marriage leads to more education rather than more education to later marriage. We do not have a suitable instrument to deal adequately with disentangling this here. But there is a widespread belief that education in general (and female education in particular) is an important way to change behaviour.



	Pakistani	Bangladeshi	Indian	Black Caribbean	Chinese
Men + women					
Arrived in UK as adult	58.4	69.0	74.4	70.3	66.7
UK-born or arrived as child	65.1	73.1	39.6	13.9	35.7
Men					
Arrived in UK as adult	62.0	69.3	75.2	63.4	79.6
UK-born or arrived as child	68.8	73.6	41.7	9.1	45.8
Women					
Arrived in UK as adult	55.1	68.7	73.7	79.0	57.6
UK-born or arrived as child	61.1	72.7	37.5	19.6	26.4

Table 4 Percentage with a spouse who came to UK as an adult

Data source is Labour Force Survey (LFS), 1979-2006, sample includes all individuals

shows the propensity of these two groups to have a spouse who entered the UK after the age of 16.

Table 4 shows that among Pakistanis, 58% of the foreign-born have a spouse who arrived in the UK as an adult. A large majority of those probably married in Pakistan. But, among those who were born in the UK or came as children, the percentage with a foreign-born spouse is higher at 65%. The Bangladeshis show a similar pattern though the proportions with a spouse who came to the UK as an adult is somewhat higher. This is a remarkable finding as it implies that if one takes at random a Pakistani or Bangladeshi who is UK-born or came as a child they are more likely to have a spouse who arrived as an adult than one who came as an adult themselves. This pattern can only be explained in terms of the practice of arranging the marriage of someone already in the UK to someone from the home country. That it is a very unusual pattern can be seen by looking at the other ethnic groups where having come to the UK as an adult is associated with a much higher probability of having a foreign-born spouse. This is true even for the Indians and Chinese among whom the practice of taking a spouse from the home country is not unknown. <sup>17</sup> The bottom two panels of Table 4 show that this pattern is true for both men and women with only minor differences. There are a number of possible explanations for this practice—marriage among first cousins remains common among Pakistanis (the survey of ethnic minorities in 1994 found that 60% of Pakistanis were married to a cousin) and most of these are in the home country, or it may be that those in the UK are a 'good catch' in the marriage market back in Pakistan or Bangladesh so one can get a 'better' spouse in that marriage market.

Although the Pakistani and Bangladeshi communities stand out in this regard, we might also be interested in whether there is any evidence of changing practice. To investigate this we estimated simple models for the probability of having a spouse who came to the UK as an adult for the sample of those

<sup>&</sup>lt;sup>17</sup>The propensity for a UK-born minority to have a foreign-born spouse is likely to be related to the fraction of the minority born in the UK and the extent to which the minority lives in an enclave. Both factors might account for why Black Caribbeans are less likely to have a foreign-born spouse.



who are UK-born or arrived as a child. On the right-hand side we include birth cohort, education, whether the individual is foreign-born and gender. The results are reported in Table 5.

The first row reports the baseline estimates of having a spouse who arrived as an adult for a man, UK-born after 1970 who left education at age 16. These baseline probabilities are much higher for Pakistanis and Bangladeshis at over 60% than for the other ethnic minority groups. However education is negatively associated with having a spouse who is an adult immigrant—a Bangladeshi graduate would be 15 percentage points less likely to have a spouse who is an adult immigrant. The effect of education is larger among the British-born. Moreover, whether the respondent is foreign-born (i.e. they came to the UK as a child) has a large positive effect on having a spouse who is an adult immigrant—something over 10 percentage points for all ethnic groups except of Black Caribbeans. The most likely explanation is that those who came as children do have stronger links with the country of origin. Gender differences are not particularly large (except for the Chinese group) and vary in sign across ethnic groups with no very obvious explanation.

Turning to the cohort effects, these are much smaller in magnitude than those we have seen in other regressions and not always monotonic. For example, Pakistanis born after 1970 seem about 4.2 percentage points more likely to have a spouse who immigrated as an adult than those born in the 1960s. This

Table 5 Probability of having a spouse who came to the UK as an adult for those UK-born or who arrived as a child

	Pakistani	Bangladeshi	Indian	Black Caribbean	Chinese
Base group:	0.65 <sup>a</sup>	0.62 <sup>a</sup>	0.31 <sup>a</sup>	0.04 <sup>a</sup>	0.28 <sup>a</sup>
men left FT	(0.01)	(0.02)	(0.009)	(0.01)	(0.03)
education at 16,					
being born in					
1970 and after					
Deviation from base g	roup				
Effect of age left	$-0.02^{a}$	$-0.03^{a}$	$-0.017^{a}$	0.007	$-0.006^{a}$
FT education	(0.002)	(0.005)	(0.001)	(0.001)	(0.005)
Foreign-born	$0.08^{a}$	$0.06^{a}$	0.1 <sup>a</sup>	$0.13^{a}$	$0.28^{a}$
	(0.01)	(0.02)	(0.01)	(0.01)	(0.03)
Female	$-0.04^{a}$	0.02	$-0.02^{a}$	$0.11^{a}$	$-0.16^{a}$
	(0.009)	(0.01)	(0.006)	(0.007)	(0.02)
Born before 1960	$0.054^{b}$	0.06	0.21a	0.02	0.05
	(0.013)	(0.02)	(0.01)	(0.01)	(0.03)
Born in 1960s	$-0.042^{a}$	0.017	$0.03^{a}$	-0.001	0.03
	(0.010)	(0.018)	(0.009)	(0.01)	(0.025)
Foreign-born ×	0.018	0.012 <sup>b</sup>	$-0.007^{a}$	$-0.02^{a}$	-0.009
education	(0.02)	(0.005)	(0.002)	(0.003)	(0.06)
Observations	11,730	3,198	20,830	9,955	2,050

Data source is Labour Force Survey (LFS), 1979–2006, sample includes all individuals who are UK-born or who arrive to the UK as a child. A linear probability model is estimated, robust standard errors in parentheses

<sup>&</sup>lt;sup>b</sup>Significant at 5%



<sup>&</sup>lt;sup>a</sup>Significant at 1%

is one area where the pace of generational change seems slow to non-existent, though rising education and an increasing fraction UK-born would be expected to reduce the incidence of taking spouses from the country of origin.

To summarise: age of marriage is lower for Pakistanis and Bangladeshis than for other ethnic minorities but is rising quite fast so that their difference is eroding. However, these two groups do stand out in having an extremely high rate of marriage with those in the country of origin. This practice seems to be eroding only slowly if at all.

# 6 Fertility

In this section we consider the number of children. The general perception is that most ethnic minorities have higher birth rates than the white UK-born population and, within ethnic minorities, the birth rate is particularly high for Pakistanis and Bangladeshis (see, for example, Coleman 1994, for an earlier analysis). For example, Table 9.5 of the 2005 Birth Statistics produced by the Office for National Statistics<sup>18</sup> shows that the total fertility rate for mothers born in the UK fell from 1.8 to 1.6 from 1991 to 2001. However, for mothers born in India the estimated total fertility rate went from 2.5 to 2.3, for mothers born in Pakistan from 4.8 to 4.7 and for those born in Bangladesh from 5.3 to 3.9. This gives the impression that there is very little change among the Pakistanis and Indians though substantial change among the Bangladeshis. However, it is much harder to get statistics on fertility by ethnicity rather than country of birth. In addition, the total fertility rate is computed by averaging the birth rate at different ages at a point in time, a methodology that makes it very hard to identify cohort effects.

Our approach to investigating fertility is to take a sample of women and use as dependent variable the number of dependent children in the household. As explanatory variables we have a polynomial in the age of the woman (these coefficients are not reported), birth cohort and whether foreign-born. In some specifications we also include education (see Table 6). One problem with the dependent variable as a measure of fertility is that it is not possible in the LFS to measure total live births—we only know if children are currently present in the household. To give a simple measure of fertility we report baseline estimates at age 30 in Table 6.

One sees in the baseline specification the higher fertility for Pakistanis and Bangladeshis (approximately two children per woman) while Indians and Black Caribbeans have about 1.3 and Chinese one. For all groups except the Chinese one sees lower fertility rate among the UK-born and for more recent generations. Hence, we do find evidence of declining fertility among Pakistanis, contrary to the ONS data on total fertility rates. However, the rate of decline in fertility does seem faster for the Bangladeshis. Table 6 shows that

<sup>&</sup>lt;sup>18</sup>Available at http://www.statistics.gov.uk/downloads/theme\_population/FM1\_34/Table9.5.xls.



Table 6 Number of dependent children for females aged between 18 and 40

	Pakistani	Bangladeshi	Indian	Black Caribbean	Chinese
Panel A: Not Controlling for Education Base group: UK-born, aged 30, being born after 1970 Deviation from base group	2.023 <sup>a</sup> (0.025)	1.961 <sup>a</sup> (0.051)	1.280ª (0.018)	1.319a (0.025)	$1.005^a (0.046)$
UK-born Born before 1970s Eogelian born	$0.163^{a}$ (0.043)	0.218 (0.136)	$0.347^{a}$ (0.026)	0.042 (0.027)	$-0.202^{a}$ (0.076)
Foreign-born Born before 1960 Born in 1960s Born after 1970 Observations	$1.057^{a} (0.048)$ $0.557^{a} (0.032)$ $0.292^{a} (0.025)$ $15,883$	$1.609^{a}$ (0.102) $1.071^{a}$ (0.061) $0.591^{a}$ (0.043) 5,469	$0.571^{a} (0.027)$ $0.410^{a} (0.022)$ $0.176^{a} (0.020)$ 23,367	$0.151^{a}$ (0.038) $0.165^{a}$ (0.038) 0.012 (0.037) 14,192	$0.102 (0.062) \\ 0.057 (0.050) \\ -0.207^{a} (0.038) \\ 4,456$
Panel B: Controlling for Education Base group: UK-born, aged 30,	2.3 <sup>a</sup> (0.03)	2.23 <sup>a</sup> (0.06)	1.7 <sup>a</sup> (0.02)	$1.44^{a}$ (0.02)	$1.29^{a}$ (0.07)
being born after 1970 Effect of age left FT education Deviation from base group	$-0.12^{a}$ (0.008)	$-0.14^{a}$ (0.01)	$-0.12^{a}$ (0.004)	$-0.06^{a}$ (0.005)	$-0.03^{a}$ (0.01)
UK-born Born before 1970 Foreian-born	0.02 (0.04)	0.11 (0.13)	$0.22^{a}$ (0.02)	0.011 (0.02)	$-0.3^{a}$ (0.08)
Born before 1960 Born in 1960s Born after 1970 Foreign-born × education Observations	0.63 <sup>a</sup> (0.05) 0.24 <sup>a</sup> (0.03) 0.09 <sup>a</sup> (0.03) 0.07 <sup>a</sup> (0.008)	1.16 $^{a}$ (0.1) 0.75 $^{a}$ (0.06) 0.39 $^{a}$ (0.05) 0.07 $^{a}$ (0.01)	0.25 <sup>a</sup> (0.03) 0.17 <sup>a</sup> (0.021) 0.05 <sup>a</sup> (0.03) 0.05 (0.009)	0.09 <sup>b</sup> (0.04) 0.13 <sup>a</sup> (0.04) 0.04 (0.04) -0.004 (0.09)	0.01 (0.08) 0.09 (0.08) -0.07 (0.08) -0.034 <sup>a</sup> (0.013)
Coor tanoni	070,11	0,000	11011	100,01	100,0

Data source is Labour Force Survey (LFS), 1979–2006, sample includes females aged between 18 and 40 inclusive. Age and age squared are also included as controls, robust standard errors in parentheses

<sup>a</sup>Significant at 1% <sup>b</sup>Significant at 5%



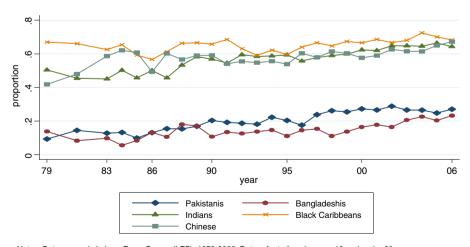
the educated (and especially the British-born educated) have lower fertility rates.

Looking at fertility, one again comes to a similar conclusion—that Pakistanis and Bangladeshis are different in the ways that popular culture suggests but there is also evidence of considerable change so that they are becoming less different over time.

# 7 Female employment

It is well-known that employment rates for Pakistanis and Bangladeshis are much lower than for other ethnic groups, for both men and women (see, for example, Cabinet Office 2003). However it is the low employment rates of women that are often singled out for particular attention as they are so large and thought to be the result of cultural preferences. Indeed the equalities review went so far as to say that the gap in employment rates between Pakistani/Banglasdeshi and white women would never be eliminated (Cabinet Office 2007). Similar conclusions can be found in Berthoud and Blekesaune (2007) and Clark and Drinkwater (2007). Here we investigate the changing patterns of female employment rates. We concentrate on employment alone and make no distinction between unemployment and inactivity—although there are differences in female unemployment rates across ethnic minorities most of the differences in employment rates are the result of differences in labour force participation rates.

Figure 4 shows a time series for female employment rates for the different ethnic groups.



Notes: Data source is Labour Force Survey (LFS), 1979-2006. Data refer to females over 18 and under 60.

Fig. 4 Female employment rates by ethnicity



Employment rates among Pakistani and Bangladeshi women in 2006 are about 20% whereas they are about 60% for other ethnic groups. Although employment rates for Pakistani and Bangladeshi women have been rising, the same is true for the other ethnic groups and the gap has not obviously been closing—hence, the conclusion noted above. However, employment rates for women are likely to be strongly associated with education, country of birth, marital status and number of children, all things that we have shown to be changing over time.

The effect of being foreign-born is remarkable. Table 7 shows the employment rates for women by ethnic group for UK- and foreign-born.

For all ethnic groups employment rates are higher among the UK-born than among the foreign-born but there is an enormous effect among Pakistanis and Bangladeshis. UK-born Pakistani women have employment rates of 45% while it is 18% for the foreign-born. For the Bangladeshis the gap is even larger— 48% for the UK-born and 12% for the foreign-born. However, employment rates among UK-born Pakistani and Bangladeshi women are still much lower than for other ethnic minorities. As Table 7 shows this difference is much more marked among married than single women, and among married women with dependent children. One interpretation of this finding is that Pakistani and Bangladeshi women are currently further back along the curve by which female employment rates rose in the Western world. As a crude stereotype, women used to stop working after marriage, then they only stopped after having children, and then they went back to work with younger and younger dependent children. To give some idea of where Pakistani and Bangladeshi women are now, the final column of Table 7 reports employment rates for US women in 1950 (we do not have access to data from a similar time period for UK women). The overall female employment rate then was 28%, but 73%

**Table 7** Female employment rates by country of birth, marital status and presence of dependent children

	Pakistani (%)	Bangladeshi (%)	Indian (%)	Black Caribbean (%)	Chinese (%)	US 1950 (%)
All Women	24.8	15.9	64.3	70.4	61.6	27.7
UK-born						
All	45.0	48.2	75.6	71.7	74.4	27.7
Single	68.3	68.7*	80.6	67.3	72.6	73.0
Married	41.9	40.4	74.7	81.2	75.5	20.2
Married—dependent children under 16	35.7	33.7	69.2	77.4	70.7	16.7
Foreign-born						
All	18.4	12.2	60.8	68.5	59.7	
Single	32.5	64.1*	76.6	64.0	62.7	
Married	19.1	11.8	61.2	74.2	59.3	
Married—dependent children under 16	16.1	10.7	61.7	72.6	59.8	

Data in the first five columns is from Labour Force Survey (LFS), 2000–2006. Cells with less than 100 observations marked with an asterisk. Sample is women aged 25–59 inclusive. Data in final column is from 1950 US Census and refers to all women in US aged 25–59 inclusive



for single women and 16.7% for married women with dependent children. These numbers are quite similar to those we see for Pakistani and Bangladeshi women in the UK today. One intriguing possibility is that these women are following a similar trajectory to that followed by US (and, probably UK) women over the past 50 years.

Table 8 explores this further reporting the results from regressions where the dependent variable is whether the woman is in employment. The regressors are similar to those reported earlier—whether UK- or foreign-born, birth cohort and education. Education is interacted with being foreign-born as the work of Lindley et al. (2006) suggests this is important. Age is also included but these coefficients are not reported.

In the first Panel of Table 8, the sample is all women. The first row reports the estimated employment rate for a woman aged 30, born in the UK after 1970 who left education at age 16 and the other rows report the effects of deviations from that base group. The first row shows that, among the base group, female employment rates are approximately 25 percentage points lower among Pakistanis and Bangladeshis. Employment rates rise with education, somewhat more strongly for the Pakistanis and Bangladeshis. There is no evidence for a marked cohort effect among the UK- or foreign-born. But the foreign-born have lower employment rates than the UK-born (except for the Black Caribbean group) with effects that are around 20 percentage points for the Pakistanis and Bangladeshis.

Panel B of Table 8, then restricts the sample to single women without dependent children. Employment rates among the base group are not much lower for Pakistanis and Bangladeshis than for the other communities. Education has a positive effect (except for Bangladeshis and Chinese) but the other variables are generally insignificant with the exception that foreign-born Pakistanis have much lower employment rates. This suggests that differences in employment rates among single women of the different ethnic minorities are relatively small.

Panel C of Table 8, then restricts the sample to married women without children. Again, for the base group employment rates are lower for Pakistanis and Bangladeshis but the effect of being foreign-born and of an older generation are enormous for these groups. This suggests that rapid change is taking place within these communities in attitudes towards the employment of married women when there are no dependent children in the household. But as Panel D of Table 8 shows, when one restricts the sample to married women with dependent children the gap in employment rates relative to married women without children is very large and the effects of being foreign-born are much reduced.

This suggests that the Pakistani and Bangladeshi communities are at the point where the attitudes towards the employment of married women without children is changing but that the birth of children continues to have a large negative effect on female employment.

This section has shown that while employment rates for Pakistani and Bangladeshi women remain much lower than for other ethnic minorities, there



Table 8 Results from regressions where the dependent variable is employment of women

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	Pakistani	Bangladeshi	Indian	Black Caribbean	Chinese
Panel A: all women					
Base group:	$0.38^{a}$ (0.012)	$0.38^{a}$ (0.03)	$0.63^{a}$ (0.011)	$0.58^{a}$ (0.012)	$0.65^{a}$ (0.03)
UK-born, aged 30,				,	
left FT education at 16,					
being born after 1970					
Effect of age left	$0.046^{a}$ (0.002)	$0.05^{a}$ (0.004)	$0.038^{a}$ (0.002)	$0.03^{a}$ (0.002)	$0.028^{a}$ (0.004)
FT education					
Deviation from base group					
UK-born					
Born before 1970	-0.007 (0.017)	-0.024 (0.048)	$-0.037^{a}$ (0.011)	$0.061^{a}$ (0.012)	0.031(0.033)
Foreign-born					
Born before 1960	$-0.17^{a}$ (0.013)	$-0.24^{a}$ (0.03)	$-0.085^{a}$ (0.012)	$0.078^{a}$ (0.013)	$-0.086^{a}$ (0.033)
Born in 1960s	$-0.17^{a}$ (0.013)	$-0.24^{a}$ (0.03)	$-0.056^{a}$ (0.012)	0.024 (0.017)	$-0.14^{a}$ (0.03)
Born after 1970	$-0.21^{a}$ (0.014)	$-0.21^{a}$ (0.03)	$-0.12^{a}$ (0.014)	0.009 (0.025)	$-0.1^{a}$ (0.03)
Foreign-born $\times$ education	$-0.032^{a}$ (0.002)	$-0.035^{a}$ (0.004)	$-0.015^{a}$ (0.002)	$-0.01^{a}$ (0.002)	$-0.012^{a}$ (0.004)
Observations	18,671	5,831	37,642	23,017	7,285
Panel B: single women without dep	lependent children				
Base group:	$0.643^{a}$ (0.051)	$0.716^{a}$ (0.122)	$0.759^{a}$ (0.030)	$0.683^{a}$ (0.025)	$0.649^{a}$ (0.125)
UK-born, aged 30,					
left FT education at 16,					
being born after 1970					
Effect of age left	$0.033^{a}$ (0.009)	0.040(0.020)	$0.023^a$ (0.005)	$0.027^{a}$ (0.003)	0.038(0.022)
FT education					



UK-born Born before 1970	-0.018 (0.064)	0.000 (0.000)	0.023 (0.024)	$0.073^{a}$ (0.025)	$0.189^{a}$ (0.052)
	$-0.310^{a}$ (0.091)	-0.090(0.133)	$-0.158^{a}$ (0.040)	-0.010 (0.028)	0.079(0.129)
	$-0.143^{b}$ (0.071)	-0.169(0.174)	-0.012(0.037)	0.020 (0.040)	-0.082(0.132)
	$-0.222^{a}$ (0.068)	0.078 (0.132)	0.009 (0.040)	0.073 (0.054)	-0.116(0.134)
Foreign-born $ imes$ education	-0.002(0.009)	0.006 (0.021)	0.007 (0.006)	-0.003(0.005)	-0.019(0.023)
	482	91	1,732	3,383	602
Panel C: married women without deper	t dependent children				
1	$0.613^a$ (0.056)	$0.639^a$ (0.128)	$0.831^a$ (0.035)	$0.817^{a}$ (0.068)	$0.868^{a}$ (0.141)
left FT education at 16,					
being born after 1970					
	$0.023^{a}$ (0.006)	0.031 (0.019)	$0.018^{a}$ (0.006)	0.007 (0.006)	0.002 (0.028)
Deviation from base group					
	0.020(0.071)	-0.161(0.256)	$-0.097^{a}$ (0.034)	0.068 (0.068)	-0.159(0.134)
	$-0.397^{a}$ (0.057)	$-0.545^{a}$ (0.129)	$-0.278^{a}$ (0.036)	-0.073 (0.068)	-0.315 <sup>b</sup> (0.142)
	$-0.215^{a}$ (0.064)	$-0.404^{a}$ (0.144)	$-0.129^{a}$ (0.039)	-0.107 (0.083)	$-0.287^{b}$ (0.145)
	$-0.325^{a}$ (0.071)	$-0.371^{b}$ (0.145)	$-0.180^{a}$ (0.048)	-0.122 (0.159)	-0.129(0.150)
Foreign-born $\times$ education	0.010(0.006)	0.022 (0.019)	0.004 (0.006)	0.003 (0.008)	0.012(0.029)
	2,362	502	7,823	2,672	422



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	Pakistani	Bangladeshi	Indian	Black Caribbean	Chinese
Panel D: married women with children	:	)		:	
Base group:	$0.263^{a}$ (0.015)	$0.262^{a}$ (0.035)	$0.575^{a}$ (0.017)	$0.638^{a}$ (0.031)	$0.558^{a}$ (0.061)
UK-born, aged 30,					
left F1 education at 16, being born after 1970					
Effect of age left	$0.043^{a}$ (0.003)	$0.044^{a}$ (0.007)	$0.036^{a}$ (0.003)	0.006 (0.004)	$0.019^a (0.007)$
FT education				,	,
Deviation from base group					
UK-born					
Born before 1970	$0.087^{a}$ (0.022)	0.013(0.060)	-0.0004(0.018)	$0.098^{a}$ (0.031)	0.111(0.067)
Foreign-born					
Born before 1960	$-0.056^{a}$ (0.017)	$-0.129^{a}$ (0.037)	0.014 (0.018)	$0.085^{a}$ (0.032)	0.012(0.062)
Born in 1960s	$-0.087^{a}$ (0.016)	$-0.137^{a}$ (0.036)	-0.029(0.019)	0.026 (0.037)	-0.053(0.063)
Born after 1970	$-0.173^{a}$ (0.017)	$-0.143^{a}$ (0.037)	$-0.145^{a}$ (0.022)	$-0.155^{a}$ (0.053)	-0.111(0.072)
Foreign-born × education	$-0.030^{a}$ (0.003)	$-0.032^{a}$ (0.007)	$-0.017^{a}$ (0.004)	0.007 (0.006)	-0.007(0.007)
Observations	11,710	4,097	21,255	5,480	3,430
7	7000 3000	H	11. 03 1	(TTC) 1070 0000 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	H - 4 14 17

Data source is Labour Force Survey (LFS) 1979–2006, sample includes all women aged between 25 and 59 inclusive. A linear probability model is estimated, robust standard errors in parentheses <sup>a</sup>Significant at 1% <sup>b</sup>Significant at 5%



is evidence of change. In particular, women from these groups would seem to be following the trajectory for female employment followed by women in the UK more generally, whereby more married women start working followed by married women with children. The quantitative conclusions we have drawn here mesh well with the more qualitative studies of Ahmad et al. (2003) and Aston et al. (2007).

# 8 Religiosity

The paper so far has documented how the Pakistani and Bangladeshi communities are different from other ethnic minorities and are likely to remain so for the foreseeable future. However, we have also emphasised how it is wrong to think of these communities as static—there is convergence in behaviour between them and other ethnic minority communities.

One question that arises from this is whether these changes occurring as a result of the influence of secularism within the communities or whether they continue to describe themselves as religious. Since 2002 the Labour Force Survey has collected data on religion and Table 9 documents the proportions describing themselves as of different religions for the five ethnic minorities we have considered in this paper.

The groups from the Indian sub-continent remain extremely religious—very few report having no religion compared to 50% of the Chinese. The Pakistanis and Bangladeshis are overwhelmingly Muslim with, in particular, very small numbers reporting they have no religion. <sup>19</sup>

Table 10 presents data from the 2003 Home Office Citizenship Survey that asks about the religion (if any) in which one was raised and the religion (if any) that one is practising now.

Table 10 shows that Islam has a much higher 'retention' rate than the other faiths—almost 90% of those who were brought up Muslim continue to practice their faith. The retention rate among Hindus and Sikhs is also high at around 75% compared to the Black Caribbeans and Chinese. However, as the fourth and fifth columns show, there is a difference in the retention rate between the UK- and foreign-born with the UK-born of all faiths being less likely to continue to practice their religion. However, the difference between the UK- and foreign-born is less marked for Muslims than for the other faiths.

Being UK-born is correlated with other factors like age and education that might also be expected to affect whether one practices his/her religion. In order to investigate this a bit further we return to the LFS which, after asking for one's religion, also asks whether one is practicing it. Table 11 shows the result of estimating a linear probability model for whether one is practising religion.

<sup>&</sup>lt;sup>19</sup>It is hard to know from this data whether the non-Muslims have converted or were brought up that way (there being small religious minorities in both countries).



	Pakistani	Bangladeshi	Indian	Black Caribbean	Chinese
Religion				Currecturi	
Christian	1.03	0.83	7.07	84.31	29.6
Buddhist	0.08	0.00	0.19	0.13	15.9
Hindu	0.36	0.47	45.69	0.32	0.30
Jewish	0.00	0.00	0.04	0.14	0.00
Muslim	95.80	96.16	12.34	0.90	0.05
Sikh	0.21	0.26	29.82	0.00	0.00
Other religion	1.83	0.47	2.35	2.12	3.06
No religion	0.70	1.82	2.50	12.08	51.15
% Practicing religion	83.9	90.01	75.14	56.2	48.45

**Table 9** Reported religion and whether practicing religion among ethnic minorities

Data source is Labour Force Survey (LFS), 2002–2006, sample includes all individuals aged over 16

The baseline group is a man, UK-born after 1970 who left full-time education at 16—the baseline probability of practising a religion is 81% for Pakistanis and 90% for Bangladeshis. However, the Indians are also high at 80%, much higher than the Black Caribbeans and Chinese—the latter group having a baseline probability of 6%. In terms of the effect of education, this only has a significant effect for Pakistanis where the more educated are less likely to practice and for Black Caribbeans where the educated are more likely to be practising. Pakistani and Chinese students are significantly more likely to be practising. Pakistani, Indian and Black Caribbean women are more likely to be practising with a particularly large effect for the last group. Turning to the cohort effects there is no evidence of declining religiosity among UKborn Pakistanis and Bangladeshis though there is among Indians and Black Caribbeans. The foreign-born are more likely to be practising than the UKborn though there is a marked negative cohort effect for Pakistanis and Bangladeshis—immigrants from these countries seem to be becoming less religious.

What this suggests is that, while there is some evidence of a move towards being less religious among all the ethnic minorities studied here, the move is less marked for Muslims than for those of other faiths. The overwhelming

Table 10 Whether practicing religion in which you were brought up

Ethnicity	Religion raised in	Still practicing that religion— All (%)	Still practicing that religion— foreign-born (%)	Still practicing that religion— UK-born (%)	Sample size
Pakistani	Islam	88	91	81	662
Banglasdeshi	Islam	87	88	81	403
Indian	Hinduism	77	80	67	455
Indian	Sikhism	74	83	55	298
Indian	Islam	94	95	90	231
Black Caribbean	Any religion	58	68	41	803
Chinese	Any religion	39	_	_	64

Data source is 2003 Home Office Citizenship Survey



Table 11 Regressions of whether practicing religion

6, after base group eft  0.0589 (0.036) 0.915a (0.048)  after  base group eft  0.0589 (0.002) 0.0519a (0.013) 0.0519a (0.013)  re 1970  0.186b (0.034) 0.113a (0.043) 0.0946a (0.019) 0.115a (0.027)	Pakistani Bangladeshi	Indian	Black Caribbean	Chinese
after base group left  0.00589 <sup>b</sup> (0.0018)  0.0589 <sup>b</sup> (0.030)  0.0519 <sup>a</sup> (0.013)  0.0519 <sup>a</sup> (0.013)  0.0519 <sup>a</sup> (0.013)  10  10  11  12  13  149(0.094)  150  14040  14060  14040  1508  1508  16080  16081  170  180946 <sup>a</sup> (0.019)		0.811 <sup>a</sup> (0.050)	0.216 <sup>a</sup> (0.060)	0.0598 (0.11)
after base group left				
base group left $-0.0056^a$ (0.0018) $0.000269$ (0.0025) $0.00589^b$ (0.030) $-0.0558$ (0.039) $0.0519^a$ (0.013) $-0.00152$ (0.018) $0.0519^a$ (0.034) $-0.00152$ (0.018) $0.0519^a$ (0.034) $0.186^b$ (0.081) $0.302^b$ (0.14) $0.186^b$ (0.087) $0.261^a$ (0.080) $0.104^a$ (0.057) $0.201^a$ (0.043) $0.213^a$ (0.043) $0.0946^a$ (0.019) $0.115^a$ (0.027)				
left $-0.0056^a$ $(0.0018)$ $0.000269$ $(0.0025)$ 10  11  11  12  13  14  15  15  15  15  15  15  15  15  15				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		-0.00177 (0.0020)	$0.0128^{a}$ (0.0035)	0.00208 (0.0058)
$\begin{array}{cccccccccccccccccccccccccccccccccccc$				
0.0519 <sup>a</sup> (0.013) $-0.00152$ (0.018)  ore 1970 $-0.0234$ (0.034) $-0.149$ (0.094)  re 1950 $0.186^{\rm b}$ (0.081) $0.302^{\rm b}$ (0.14) 150s $0.142^{\rm b}$ (0.057) $0.261^{\rm a}$ (0.080) 160s $0.104^{\rm a}$ (0.033) $0.213^{\rm a}$ (0.043) 170 $0.0946^{\rm a}$ (0.019) $0.115^{\rm a}$ (0.027)		-0.00946 (0.038)	0.104 (0.057)	$0.148^{b} (0.069)$
nre 1970 $-0.0234 (0.034)$ $-0.149(0.094)$ re 1950 $0.186^{\rm b} (0.081)$ $0.302^{\rm b} (0.14)$ 150s $0.142^{\rm b} (0.057)$ $0.261^{\rm a} (0.080)$ 160s $0.104^{\rm a} (0.033)$ $0.213^{\rm a} (0.043)$ 170 $0.0946^{\rm a} (0.019)$ $0.115^{\rm a} (0.027)$		$0.0495^{a}$ (0.013)	$0.142^{a}$ (0.017)	-0.0300(0.037)
nre 1970 $-0.0234 (0.034)$ $-0.149(0.094)$ nre 1950 $0.186^{\rm b} (0.081)$ $0.302^{\rm b} (0.14)$ 150s $0.142^{\rm b} (0.057)$ $0.261^{\rm a} (0.080)$ 160s $0.104^{\rm a} (0.033)$ $0.213^{\rm a} (0.043)$ 170 $0.0946^{\rm a} (0.019)$ $0.115^{\rm a} (0.027)$				
n $0.302^{b} (0.081)$ $0.302^{b} (0.14)$ (0.55) $0.142^{b} (0.057)$ $0.261^{a} (0.080)$ (0.60s $0.104^{a} (0.033)$ $0.213^{a} (0.043)$ (0.115 $^{a} (0.027)$ (0.115 $^{a} (0.027)$ (0.115 $^{a} (0.027)$ (1.15 $^$		$0.124^{a}$ (0.034)	$0.0940^{b}$ (0.040)	-0.0583(0.12)
re 1950 $0.186^{b}$ $(0.081)$ $0.302^{b}$ $(0.14)$ $(0.057)$ $0.104^{a}$ $(0.057)$ $0.261^{a}$ $(0.080)$ $(0.080)$ $0.104^{a}$ $(0.033)$ $0.213^{a}$ $(0.043)$ $0.0946^{a}$ $(0.019)$ $0.115^{a}$ $(0.027)$ $(0.027)$				
50s 0.142 <sup>b</sup> (0.057) 0.261 <sup>a</sup> (0.080) (60s 0.104 <sup>a</sup> (0.033) 0.213 <sup>a</sup> (0.043) (0.043) 0.0946 <sup>a</sup> (0.019) 0.115 <sup>a</sup> (0.027) (0.07)	_	0.0890 (0.073)	$0.390^{a}$ (0.084)	0.138(0.16)
60s $0.104^a$ $(0.033)$ $0.213^a$ $(0.043)$ $(0.07)$ $0.0946^a$ $(0.019)$ $0.115^a$ $(0.027)$ $(0.027)$		$0.235^{a}$ (0.052)	$0.299^{a}$ (0.060)	-0.0486(0.13)
70 $0.0946^a (0.019)$ $0.115^a (0.027)$ (		$0.288^{a}$ (0.034)	$0.282^{a}$ (0.048)	$0.211^{b}$ (0.098)
		$0.239^{a}$ (0.024)	$0.108^{a}$ (0.041)	$0.166^{a}$ (0.062)
	349 1,209	4,720	3,526	709

Data source is Labour Force Survey 2002–2003 (the only years for which religious practice is available). The sample for Indians is restricted to Hindus or Sikhs and for Pakistanis and Bangladeshis to Muslims. A third order polynomial in age is also included but the coefficients are not reported, robust standard errors in parentheses

<sup>a</sup>Significant at 1% <sup>b</sup>Significant at 5%



majority of Pakistanis and Bangladeshis will describe themselves as Muslims for generations to come and a majority will continue to practice their faith (this is consistent with the evidence in Bisin et al. 2008 that Muslims are more serious about their faith than adherents to other religions). The changes in behaviour documented earlier in this paper are occurring among people who continue to describe themselves as Muslim, not as a result of a drift away from Islam and the active embracing of secularism. The obvious interpretation of this finding is that the members of the Pakistani and Bangladeshi communities see the changes in cultural practise we have documented in this paper as not being in conflict with their conception of what it means to be a good and devout Muslim. It would seem that Islam, as practiced by these communities is a flexible religion, capable of considerable change in norms of behaviour.

#### 9 Conclusions

This paper has compared the behaviours of the largest ethnic minorities in Britain with the intention of seeing whether the Muslim groups—the Pakistanis and Bangladeshis—are different. We considered a wide, though not exhaustive, <sup>20</sup> range of indicators—the gender gap in education, age at marriage, fertility and female employment. In all these dimensions the Muslim groups are different and in what is probably the expected direction. But, the differences are declining. This is partly because the UK-born within these communities have very different behaviour (especially the educated), but also because of change among the UK- and foreign-born. However, we have also shown that this is happening while almost everyone in these groups continues to describe themselves as Muslim so what are often thought of as being secular values are, for these groups, being embodied in a changing set of behaviours deemed appropriate within Islam.

**Acknowledgements** We would like to thank the editor and three referees for their comments on an earlier version of this paper.

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<sup>&</sup>lt;sup>20</sup>For example, it might also be interesting to look at educational attainment among children (see Modood 2005) or segregation (see Briggs et al. 2005; Burgess et al. 2006a, b).



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