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# Ethnicity and Second Generation Immigrants in Britain

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#### **Non-Technical Abstract**

This paper reviews the labour market performance and educational attainment of ethnic minorities and second generation immigrants in the UK over the last three decades. We first describe the size and composition of the minority population and its regional distribution over time, and investigate their labour market performance relative to the white native population. We then present an intergenerational comparison of education, employment, and wages of different ethnic minority groups born in Britain to their parents' generation, and to equivalent groups of white native born individuals. We conclude with a summary of recent research on the school performance of children from ethnic minorities relative to their white peers.

**Keywords:** Ethnic minorities, Second generation immigrants, Intergenerational comparison.

**JEL Classification:** J15, J61, J62.

## **Ethnicity and Second Generation Immigrants in Britain**

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This paper reviews the labour market performance and educational attainment of ethnic minorities and second generation immigrants in the UK over the last three decades. We first describe the size and composition of the minority population and its regional distribution over time, and investigate their labour market performance relative to the white native population. We then present an intergenerational comparison of education, employment, and wages of different ethnic minority groups born in Britain to their parents' generation, and to equivalent groups of white native born individuals. We conclude with a summary of recent research on the school performance of children from ethnic minorities relative to their white peers.

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### 1. Introduction

According to the 2001 Census, the percentage of non-white individuals (which include both ethnic minorities and individuals of mixed ethnicity) in the British population was 8.1% (or 4.6 million), up from 5.5% (or 3 million) in 1991. While a precise assessment of the current size of minority population will be possible with the 2011 Census, the Labour Force Survey (LFS) shows that in the third quarter of 2009, about 11.7% of the working age population (16-64 for men, 16-59 for women) was non-white.

British born descendents of ethnic minority immigrants represent an increasing share of the ethnic minority population in the UK. According to the LFS, in 1991 25.2% of the individuals in working age who identified themselves as members of an ethnic minority group were born in the UK. This share has increased in 2001 to 35% and in 2009 to 36.6%.

How do Britain's ethnic minorities perform in the labour market? Do those who are born in Britain outperform their parents, and are the same relative disadvantages across groups that are visible in the parent generation transmitted to descendents who are born in Britain? How do British and foreign born ethnic minorities perform compared to their British born white peers? How does educational achievement at an early age develop in contrast with white majority individuals, and how does it translate into wages and employment? This chapter provides answers to these questions. It is an assessment of how the economic performance of ethnic minorities relative to the white native population has changed over the last decade. If not otherwise specified, the figures reported in this chapter have been computed from the UK LFS. We start, in section 2, with a description of the size and geographic distribution of the minority population in the UK. In section 3 we concentrate on the relative economic performance of minorities, and its evolution over time. We then focus on second generation immigrants: section 4 presents an intergenerational comparison of education, employment, and wages of different ethnic minority groups born in Britain to their parents' generation, and to equivalent groups of white native born individuals. Section 5 investigates the early stages of educational attainment of British born minority children: it analyses the evolution of the attainment gap between white British born and ethnic minority pupils throughout compulsory schooling.

#### 2. Ethnic minorities in Britain

Large scale immigration of individuals of ethnic minority descent to Britain started after the Second World War. Today, the six largest ethnic minority groups in Britain (in descending population size) are Indian, Pakistani, Black Caribbean, Black African, Bangladeshi and Chinese. These groups differ in the timing of their arrival. While the majority of immigrants from the Caribbean arrived in the period between 1955 and 1964, the main time of arrival of Black African, Indian and Pakistani was between 1965 and 1974 (Peach, 1996). The 2001 Census counted 565,876 Black Caribbean, or 1.0 percent of the total UK population and 12.2 percent of the ethnic minority population. Black African migration to Britain increased since the immediate post-independence period of the 1960s, with a marked increase in the number of Africans traveling to Britain for higher education and technical training (Daley, 1996). Large scale labour migration from India to Britain took place mainly in the 1950s and 1960s (Robinson, 1996). Indians were – according to the 2001 UK Census - the largest ethnic minority group making up about 22.7 percent of the minority ethnic population and 1.8 percent of the total UK population. Bangladeshi arrivals were later, and peaked in

the period 1980-84. The Chinese form the smallest ethnic group. Since the 1980s, there has been a resurgence of immigration from mainland China, consisting mainly of students and scholars arriving in Britain, and staying on after completing their education (Cheng, 1996). We summarise some of these trends in Figure 1, which reports (for the period 1979-2009) the evolution of the share of foreign born individuals of all ethnicities in the working age population, the share of white foreign born, the share of ethnic minority foreign born (excluding individuals with mixed ethnicity), and the share of ethnic minority native born.

All the lines in the figure show a clear upward trend. The share of foreign born in the working age population almost doubled between 1979 and 2009, increasing from 7.3% to 14.4%. Almost a third of this increase was due to the growth of ethnic minority foreign born individuals, whose share in the working age population increased from 2.8% to 5%. Most of the remaining change was due to the increase in the share of white foreign born (from 2.4% to 6.8%)<sup>1</sup>. However, the graph also outlines the dramatic growth in the share of British born ethnic minorities (self-defined) in the working age population, which increased tenfold over the observation period. While in 1979, only 0.3% of the working age population was composed of British-born ethnic minority individuals, this share is 1% in 1990, 1.8% in 2000, and 2.9% in 2009.

Figure 2 displays information on the evolution in the shares of working age first generation ethnic minority immigrants and ethnic minority individuals who are born in Britain for the six largest non-white minority populations (Black Caribbean, Black African, Indian, Pakistani, Bangladeshi and Chinese). Panel A of Figure 2 shows a significant downward trend in the share of first generation Black Caribbean, possibly due to return migration after retirement or onward migration to North America (see also Peach, 1996). Black Caribbean have also the highest share of British born descendents relative to all other ethnic groups until 1997, which is not surprising, given their earlier arrival in Britain. The remaining panels show that other ethnic minority groups have markedly different trends. First generation Indian immigrants, the single most numerous ethnic group over the entire period, are a more or less constant share of the working age population (Panel C). In contrast, first generation immigrants of all other ethnic groups exhibit a clear upward trend, particularly so for Black Africans (Panel B), but also sizeable for those of Indian (Panel C) and Pakistani (Panel D) descent. Bangladeshis (Panel E) and Chinese (Panel F) form the smallest groups among both first and second generation, which is explained partly by their later arrival in Britain compared to the other ethnic minority groups. Overall, these figures suggest a considerable increase in the fraction of ethnic minorities, both foreign born and British born, on the British population over the last three decades.

Interesting is the geographic distribution of ethnic minorities, which differs quite dramatically from that of the British born whites. Further, their regional distribution is relatively stable over time. Table 1 reports the geographic distribution of white natives and ethnic minorities over nine English regions, Wales, and Scotland<sup>2</sup> in 1979-1983, 1989-1991, 1999-2001, 2007-2009 (we had to pool several years to increase the sample size). In all years ethnic minorities are four to five times more concentrated in London than white natives. They also tend to cluster in the West Midlands more than white natives, although the difference is not as large as in London. The share of individuals from an ethnic minority group living in London has increased over time from 43% in 1979-1983 to 47.6% in 1999-2001, and slightly decreased again to 42.5%

<sup>&</sup>lt;sup>1</sup> The remaining change is explained by an increase in immigrants of mixed ethnicity.

<sup>&</sup>lt;sup>2</sup> We have defined the regions based on the variable uresmc in the LFS. Because of the small sample size in some regions, we have grouped together "Tyne & Wear" and "Rest of Northern Region" into "North"; "South Yorkshire", "West Yorkshire" and "Rest of Yorkshire & Humberside" into "Yorkshire"; "Inner London" and "Outer London" into "London"; "West Midlands (met county)" and "Rest of West Midlands" into "West Midlands"; "Greater Manchester", "Merseyside" and "Rest of North West" into "North West"; "Strathclyde" and "Rest of Scotland" into "Scotland".

since 2007. Over the same period, the share of white natives living in London has steadily decreased from 10.6% to 8.2%.

## 3. Labour market performance of ethnic minorities

How do individuals belonging to a minority group perform on the labour market, relative to white natives, and has this relative performance changed over time? In this section we address this issue comparing the probability of employment and wages of minorities and of white natives<sup>3</sup>.

Table 2 reports the difference in employment rate (defined as the ratio of employed individuals to the working age population) for men and women between white natives and each of the six minority groups, net of seasonal effects, in 1993, 2000, and 2009<sup>4</sup>. The last row reports the employment rate of white natives. The employment rate of ethnic minority men and women is generally lower than those of white natives. The only exception are Indian men in 2009, whose employment rate is not significantly different from those of white natives. Even in earlier years, Indian men are the least disadvantaged group: their employment rate is six percentage points lower than white natives in 2000 and eight percentage points lower in 1993. By contrast, Pakistani and Bangladeshi men are significantly disadvantaged relative to white native men in all years, although the gap is reducing over time. In 1993 Pakistani (Bangladeshi) men were 24 (27) percentage points less likely to be working than white natives, while in 2009 the difference reduces to 10 (7) percentage points. The employment rate among Pakistani and Bangladeshi women is between 43 and 53 percentage points lower than among white native women in all years. Interestingly the employment differential with respect to white natives is in all years smaller for Black Caribbean women than for Black Caribbean men. We display in Table 3 the percentage difference in average hourly wages between white natives and ethnic minorities<sup>5</sup> for the same years, and we again distinguish between men and women. In Panel A) we only control for seasonality. Again, the disadvantage of the Pakistani and Bangladeshi minorities is evident. In 2009, Pakistani men earn on average 26% less than white natives, while Bangladeshi men have 35% lower wages. However, while for the Bangladeshi minority wage differentials are closing over time (from -53% in 1993, to -50% in 2000 and -35% in 2009), for the Pakistani ethnic group wage differentials are rather stable. Among the other minorities, Black Caribbean men display a 27% wage disadvantage in 2009. Black Caribbean women do not have significant wage differentials in 2009, but exhibit 15% higher wages than white native women in earlier years. Indian men and women earn respectively 14% and 18% more than white natives in 2009. These results indicate wage disadvantages only for men of some ethnic group, and even show wage advantages for other groups and for women.

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<sup>&</sup>lt;sup>3</sup> See also Blackaby et al. (2002, 2005), Heath et al. (2000), Heath and Yu (2006), and Wadsworth (2003) for studies on this topic.

<sup>&</sup>lt;sup>4</sup> To obtain the numbers in the table, we have run for every year reported regressions of a dummy variable for employment on quarter dummies, and ethnicity dummies (whose coefficients we report). The sample is restricted to white natives and ethnic minorities, and white natives are the excluded group. Cell entries are the estimated coefficients on each minority group dummy. Robust standard errors in parenthesis are clustered at the individual level.

<sup>&</sup>lt;sup>5</sup> We have run in every year regressions of log hourly wages on quarter dummies, gender and ethnicity dummies. The sample is restricted to white natives and ethnic minorities, and white natives are the excluded group. Cell entries in Panel A are the estimated coefficients on each minority group dummy. In other specifications, we additionally include dummy variables for the region of residence (Panel B), a quadratic in age, and dummies for high and intermediate education (low education is the excluded category) (Panel C). Education variables are based on the age at which individuals left full time education. Robust standard errors are reported in parenthesis.

However, we have shown above (see also Table 1) that ethnic minorities are much more concentrated in London than white natives, where wages (and prices) are higher than the rest of Britain. It is therefore important to control for the regional distribution when computing average wage differentials. Panel B of Table 3 shows that, after controlling for the regional distribution, wage differentials become negative and significant for almost all ethnic groups and years. The exception are Chinese women, who do not display any significant wage difference with respect to white natives, and the Indian minority, that has a negative wage differential only in 2000 (and in 1993 for women only), and a positive differential for women in 2009. Finally, in Panel C we show wage differentials after accounting for the differences in age and education structure<sup>6</sup>. In this case, almost all groups exhibit negative and sizeable wage differentials in every year, with Bangladeshi men having the highest wage disadvantage (-45%) in 2009. Thus, Britain's ethnic minority population, if having the same age- and education structure, and the same regional distribution than native whites, would experience large and significant wage disadvantages. This is particularly so for males.

## 4. Intergenerational comparisons

#### a. Data and sample construction

Although the LFS classifies people according to their country of birth as well as their ethnicity, it does not collect information on the parental country of birth. In this section, we provide an attempt to assess the intergenerational mobility of Britain's ethnic minority populations, following and extending work by Dustmann and Theodoropoulos (2010). We construct two samples: The first consists of first generation ethnic minority immigrants of Black Caribbean, Black African, Indian, Pakistani, Bangladeshi, and Chinese origin, born between 1933 and 1954, and whom we observe in the LFS between 1979 and 1988. The second sample are their likely descendents: British born ethnic minorities, born between 1963 and 1975, and observed in the LFS in 1998-2009. The second group is in a similar age range as the first group 20 years earlier. For each of these samples we construct a white British born comparison sample of individuals of the same birth cohorts.<sup>7</sup>

#### b. Educational achievement

The LFS offers two measures of educational attainment, one based on the age at age at which the individual left continuous full time education, and the other based on educational qualification. However, since the variable coding educational qualifications does not record foreign qualifications (see Manacorda, Manning, and Wadsworth 2006 for a discussion), we base our analysis on the number of years of study. To obtain a measure of years of continuous full time education from the age at which individuals left full time education, we adjust for the different ages at which individuals start full time education in different countries and for changes in the starting age of full time education over time. We also make adjustments for the individuals who started full time education abroad or came to Britain before the starting age of primary school.

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<sup>&</sup>lt;sup>6</sup> Specifically, we control for age and age squared, and for three education dummies. We classify individuals in three education groups: low (left full time education before the age of 17), intermediate (left full time education between 17 and 20), and high (left full time education after age 20).

<sup>&</sup>lt;sup>7</sup> See Dustmann and Theodoropoulos (2010) for more detail. Other than in their paper, we have increased the observation window for the two groups by 5 years.

In figure 3 we present mean educational achievements of first generation immigrants and their descendents, measured as the age at which individuals leave school minus the school entry age, and based on the cohorts we construct as described above. We also include the corresponding numbers for white native born reference groups.

In the figure, entries on the diagonal line indicate that educational attainment of the parent generation is equal to that of their descendents. For all groups, (including whites) entries are below the main diagonal, suggesting a higher educational attainment of the later cohort than of their parent generation. The vertical and horizontal lines that cross at the "white" entry define different areas, which compare the relative educational improvement from the parent- and the offspring generation of white British born with the relative educational improvement of British born minorities and their foreign born parent generation. All minority groups with entries in the upper right rectangular are groups where both the British born as well as their foreign born parent generation have higher levels of education. The grey lines through the entries indicate the confidence intervals.

For the African and Indian, the parent generation has more years of full time education than the white British born reference group. The Chinese and Pakistani first generation groups are similar to whites, and the Caribbean and Bangladeshi have slightly lower years of full time education. More importantly, for all groups (except for the Caribbean), those who are born in Britain have more years of full time education than their white British-born peers. Furthermore, for some groups, the difference between the parent generation and the generation of their descendents is quite dramatic, and far larger than for British born whites.

Overall, the figure suggest that the descendents of British ethnic minority immigrants (born between 1963 and 1975 in Britain, and observed between 1998 and 2009) have higher levels of full time education than their parents, and (except for the Caribbean) higher levels of full time education than their British born white peers<sup>9</sup>. Also, the difference between parent- and child generation is larger for all minority groups than for whites, with the exception of the Black Caribbean. That is quite remarkable, and paints quite a positive picture of educational attainments of Britain's ethnic minorities.

### c. Employment

Do these educational advantages translate into employment- and wage advantages? In figure 3 we report a similar graph, but for employment differences between parent- and descendent generation. The way the graph is constructed is the same as before. Other than before, the figures now suggest a marked

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<sup>&</sup>lt;sup>8</sup> For foreign born individuals we use the school entry age of their country of origin at the time they started full time education; see Dustmann and Theodoropoulos (2010) for details.

<sup>&</sup>lt;sup>9</sup> It is also worth noting that among this recent cohort, 21% of the White have a University degree, versus 17% of the Black Caribbean, 47% of the Black African, 39% of the Indian, 27% of the Pakistani, 34% of the Bangladeshi and 54% of the Chinese.

<sup>&</sup>lt;sup>10</sup> Our measure for the overall economic activity of individuals distinguishes between paid employment, self-employment, unemployment, economical inactivity as well as people on government schemes. We consider here only individuals in dependent employment, and exclude the self-employed (these are 7.2% of white natives and 6.1% of British born ethnic minorities respectively in year 1998 and for the 1963-1975 birth cohort) as well as those individuals on government schemes. The latter group is about 0.1%. We also drop all those individuals who were in full-time education at the time of the survey. We define an individual to be employed if he/she is in paid employment, as opposed to being economically inactive or unemployed.

disadvantage of ethnic minority individuals, with a large heterogeneity between the different ethnic groups. Most ethnic minority individuals in both first and second generation have markedly lower employment probabilities than their White native-born peers, with the largest differences for individuals from the Bangladeshi and the Pakistani communities. <sup>11</sup> Individuals of the most recent generation from all communities (including whites) have higher employment rates than their parents' generation. The only exception is Black Caribbean. For this group, the employment rate was higher than for whites in the first generation, but it is markedly lower in the second generation. The opposite is true for the Chinese community, while second generation Indians have an employment probability that is very similar to that of natives.

Thus, British born ethnic minority individuals, despite having more schooling, have lower employment probabilities than their British born white peers. Further, there is substantial heterogeneity in employment between the different minority groups.

#### d. Wages

We now turn to wages, and we concentrate here on the above-defined cohorts of British-born ethnic minorities.<sup>12</sup> Table 4 presents percent differences in wages between British born ethnic minorities and white natives. We start by reporting (in Panel A) differences in mean wages conditioning only on time trends by adding year dummies and quarter dummies. The last two rows of Panel A suggest an overall wage advantage for British born ethnic minorities of 4.8 percent. Breaking this down by gender shows that British born ethnic minority males face a wage disadvantage of 2.7 percent, while British born ethnic minority females face a wage advantage of 13.3 percent. These figures may be driven by the educational advantage of ethnic minorities as well as by different regional distributions. The female wage advantage may also be partly explained by differently selective employment across the population (Dustmann and Theodoropoulos (2010) provide evidence for more selective workforce participation among minority females) Thus, in Panel B we also control for age, age squared, and add three dummies for educational background defined as in section 3 (see footnote 5). The last two rows of Panel B suggest that the wage advantage observed in Panel A turns into an overall wage disadvantage once controlling for the age and the education of the individual. Breaking down the results by gender, we see that for males, the wage disadvantage has increased by 8.9 percentage points, whereas the wage advantage of ethnic minority females has decreased by 8.2 percentage points. In Panel C we control - in addition - for differences in the geographic distribution by including region dummies (omitted category Greater London). The overall wage disadvantage increases further for males, whereas for females, the wage advantage disappears. Interesting is also that – for males – there is now a wage disadvantage in each ethnic group.

Thus, these numbers suggest first that male and female British born ethnic minorities differ in the wage position, in comparison to their white peers: While male ethnic minority individuals earn slightly lower wages than their white counterparts, females earn – on average – substantially more. However, once we keep educational attainment and regional allocation the same for the two groups, the female advantage

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<sup>&</sup>lt;sup>11</sup> When we break these numbers down by gender it turns out that these differences are mainly driven by females, who in both the first and the second generation – have substantially lower employment probabilities than their male counterparts. See Dustmann and Theodoropoulos (2010) for details.

<sup>&</sup>lt;sup>12</sup> We compare only British born ethnic minorities with white natives as the LFS did not collect information on earnings prior to 1992.

disappears, and the male disadvantage increases substantially. Thus, male British born ethnic minorities who have the same education and age structure, and the same regional distribution than their British born white peers, earn substantially lower wages.<sup>13</sup>

### 5. Performance at school

In the previous sections, we provide analysis of British born ethnic minorities in the labour market, and report their educational overall attainment. With respect to the latter, we reported quite considerable educational advantages of British born ethnic minorities. In this section we investigate the attainment gap at a very early stage: between the age of 5 and 16, and through key stage 1 to 4. We draw here on research by Dustmann, Machin and Schoenberg (2010). We analyse the evolution throughout compulsory school.

How does the achievement of White British children differ from that of children from ethnic minorities just before the start of school, at the age of 5? Table 5 (from Dustmann, Machin and Schoenberg 2010) reports achievement gaps based on a Vocabulary Naming Assessment, a Picture Similarity Assessment, and a Pattern Construction Assessment, from the Millennium Cohort Survey (MCS)<sup>14</sup>. The MCS is a longitudinal survey that follows a random sample of about 20,000 children born in the UK between September 2000 and August 2001. Ethnic minorities are over-sampled.<sup>15</sup>

According to all tests, white British pupils outperform ethnic minority pupils, which is in contrast with the overall educational advantage of ethnic minorities at working age shown in Table A. According to the Vocabulary Naming Assessment, scores of all ethnic minority children are at least 42% of a standard deviation lower than those of White British children; for non-Caribbean blacks, Bangladeshi, and Pakistani children, the gap is larger than 1 standard deviation. Achievement gaps are substantially smaller for the Picture Similarity and Pattern Construction Assessment. There is again substantial heterogeneity across ethnic groups: While the achievement gap is at least 30% of a standard deviation for Black Caribbean, other black (Pattern Construction Assessment), Pakistani and Bangladeshi children (Pattern Construction and Picture Similarity Assessment), it is insignificant or even positive for Indians, Chinese and other ethnic minority children — although these groups considerably lack behind in the Vocabulary Naming Assessment.

Does the disadvantage of minority children remains constant throughout the school curriculum? Figure 5 plots the English (Panel A) and Mathematics (Panel B) test score gaps at the end of 2nd grade at the age of 6/7 (Key Stage 1), at the end of 6th grade at the age of 10/11 (Key Stage 2), at the end of 9th grade at the age of 13/14 (Key Stage 3) and at the end of compulsory schooling at the age of 15/16 (Key Stage 4) (see Dustmann, Machin and Schoenberg (2008) for more details<sup>16</sup>). Information on test scores at each key stage comes from the National Pupil Database (NPD) for years 1998-2007, and has been matched with information from the Pupil Level Annual School Census (PLASC), which has information on pupils' background and ethnicity. Note that these gaps are not comparable to those at age 5, which we report in the previous table: they refer to a different cohort of children, born about 10 years earlier than the children in the MCS, and the achievement outcomes are not directly comparable. However, a certain pattern is

<sup>15</sup> See Dustmann, Machin and Schoenberg (2010) and Dustmann and Trentini (2009) for more details.

<sup>&</sup>lt;sup>13</sup> Heath and McMahon (2005) and Platt (2005, 2007) investigate aspects of the performance of second generation immigrants in the UK. Algan et al. (2009) provide a study in a comparative setting.

<sup>&</sup>lt;sup>14</sup> Test scores have been standardised to have mean 50 and standard deviation 10.

<sup>&</sup>lt;sup>16</sup> Wilson et al. (2005) and Cassen and Kingdon (2007a,b) study also the evolution of achievement gaps between white natives and ethnic minorities.

visible. Ethnic groups that performed poorly in the Pattern Construction Test at age 5 (i.e. Black Caribbean, Black other, Bangladeshi, and Pakistani) tend to perform poorly, while groups that performed well at age 5 (i.e. Indian, Chinese and other background) tend to perform somewhat better, in the Key Stage 1 English and mathematics exams.

Do achievement gaps between White British and ethnic minority pupils widen or narrow throughout primary and secondary school? Figure 5 shows that through primary school, from Key Stage 1 to Key Stage 2, most ethnic minority groups catch up, or in the case of Chinese and Indian pupils, even overtake White British pupils, in both English and mathematics. The catch-up (or overtaking) is most striking for Bangladeshi and Chinese pupils, for whom the gain exceeds 20% of a standard deviation. The only group for which we do not observe a narrowing of the achievement gap in primary school is Black Caribbean pupils. For this group, both the English and mathematics test score gap widened by about 6% of a standard deviation over a 4 year period. Does the catch-up (or, in the case of Black Caribbean pupils, the fall back) of the achievement gap continue through secondary school? The widening of the achievement gap between White British and Black Caribbean pupils appears to have stopped, as the English and mathematics gap at the end of primary school at Key Stage 2 and at the beginning of secondary school at Key Stage 3 is roughly the same. All other groups continue to catch up or, in the case of Chinese pupils, pull away from White British pupils throughout compulsory schooling. All groups, including Black Caribbean pupils, experience particularly large gains between Key Stage 3 and Key Stage 4. At the end of compulsory schooling, Indian and Chinese pupils outperform White British pupils by more than 30% of a standard deviation in both English and mathematics. All other ethnic minorities perform slightly worse on average than White British pupils, where Black Caribbean pupils lag behind most.

Dustmann, Machin and Schoenberg (2010) investigate different reasons for the evolution of the achievement gap between the different minority groups, and white natives. They conclude that language spoken at home is the single most important factor why most ethnic minority pupils improve relative to White British pupils, and why Black Caribbean pupils make smaller progress than any other ethnic group. Ethnic minority pupils go to schools with higher minority shares than their white counterparts, with higher shares of classmates eligible for free meals, and with lower average achievements of classmates, although these differences decline over the school curriculum. Dustmann, Machin and Schoenberg (2010) also show that, while the largest part of the relative improvement of ethnic minority pupils takes place within schools, a substantial part of the improvement takes place at the transition from primary to secondary school, and between schools.

## 6. Conclusion

In this chapter we investigate the educational and labour market performance of Britain's ethnic minority individuals in comparison to their British born white peers. The most important findings can be summarised as follows:

British white born and ethnic minority individuals have a very distinct regional distribution.
 In particular, minorities are disproportionately more concentrated in London than white natives.

- All minorities experience a lower employment rate than white natives. They also tend to have lower wages, if we control for their regional distribution and education. However, there are considerable difference between ethnic groups.
- Second generation immigrants tend to be better educated than their parents' generation, and better educated than their white native peers. The relative improvement in education between the parent- and descendent generation is far larger for ethnic minorities. Still, these British born ethnic minorities are less likely to have jobs and earn on average lower wages, if they had the same characteristics than their white British born peers.
- Minority children experience achievement disadvantages before starting school. These disadvantages are reduced considerably during compulsory schooling, and turn into substantial advantages for some ethnic groups at the end of compulsory schooling.

Thus, British born ethnic minorities, despite their initial disadvantage in the British education system, perform remarkably well in terms of their educational achievements, catching up continuously throughout the British compulsory school system, and achieving higher shares of college education than their British born white peers. We should note however that there is a considerable heterogeneity between the different minority groups.

Despite their educational success, their employment probabilities are lower than those of whites, and for some groups dramatically so. Further, while for the same educational achievements, and the same regional allocation, wages for White and ethnic minority British born females are about the same, males experience an about 16 percent wage disadvantage. It should be interesting for future research to analyse the reasons for this disadvantage as well as for the heterogeneity between genders and ethnic groups.

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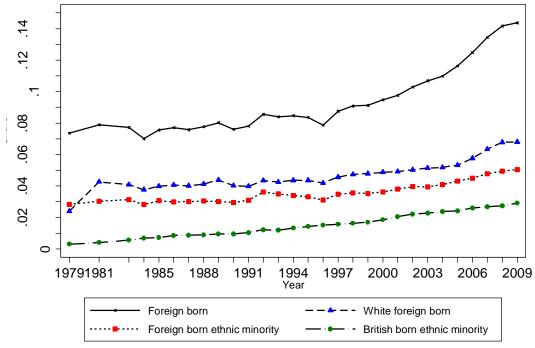
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## **Figures**

Figure 1 - Share of foreign born/ ethnic minority in working age population



Source: LFS 1979-2009.

Figure 2 - Share of foreign and British born ethnic minorities in working age population

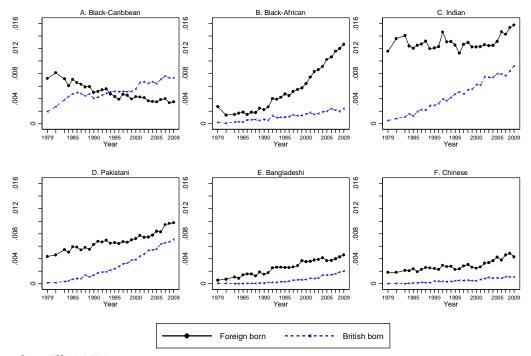


Figure 3 – Years of schooling by ethnic group and status of generation.

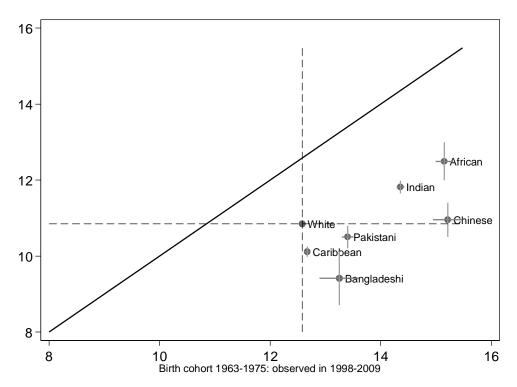
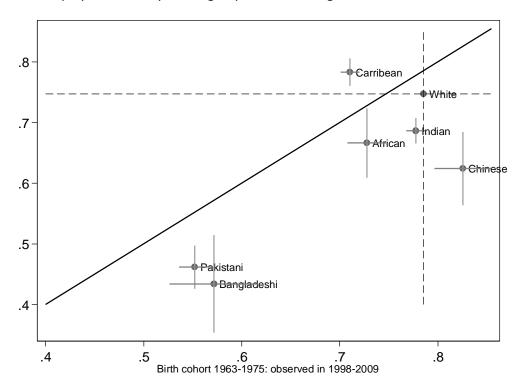


Figure 4 – Employment rate by ethnic group and status of generation.



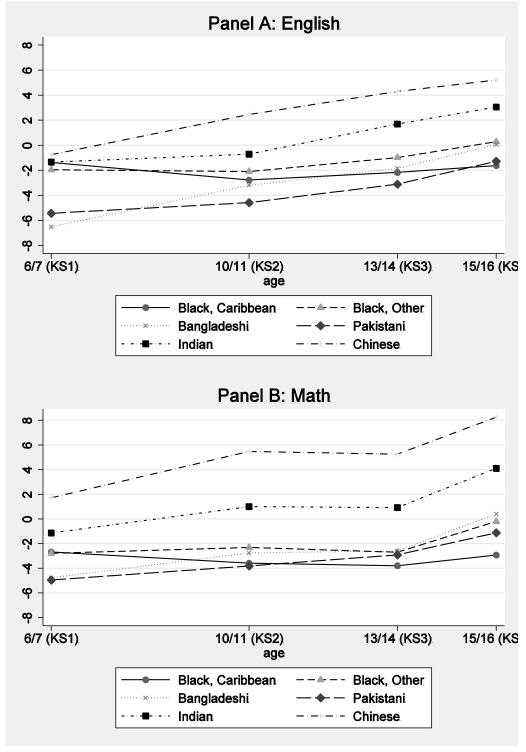


Figure 5 – Ethnic Test Score Gaps Throughout Compulsory Schooling

The figures show the evolution of the ethnic test score gap throughout compulsory schooling, at age 6/7 (Key Stage 1), age 10/11 (Key Stage 2), age 13/14 (Key Stage 3), and age 15/16 (Key Stage 4). Test scores are standardized with mean 50 and standard deviation 10. Source: NPD and PLASC, Key Stage 1 exams in 1998 and Key Stage 4 exams in 2007. N=469,848.

## **Tables**

Table 1 - Regional distribution of white natives and ethnic minorities

J	197	9-1983	1989-1991		1999-2001		2007-2009	
Region	White natives	Ethnic Minorities						
North	6.1	1.0	5.9	1.1	5.8	1.1	5.8	1.8
Yorkshire	9.3	8.6	9.2	7.4	9.0	7.1	9.3	7.5
East Midlands	7.1	3.9	7.4	6.7	7.6	5.8	7.8	6.5
East Anglia	3.5	1.9	3.7	1.5	3.9	1.0	4.1	1.3
London	10.6	43.0	9.8	45.4	9.2	47.6	8.2	42.5
South East	18.5	12.3	19.4	10.3	19.9	10.7	19.9	12.1
South West	8.0	2.6	8.5	2.7	8.8	1.7	9.3	2.2
West Midlands	9.5	17.4	9.4	14.0	9.1	14.9	8.8	14.1
North West	12.2	6.4	11.7	7.9	11.5	7.1	11.4	8.3
Wales	5.3	1.5	5.4	0.9	5.4	1.0	5.5	1.0
Scotland	10.0	1.4	9.8	2.1	9.7	2.0	9.8	2.6

The table reports the regional distribution of white natives and ethnic minorities (foreign and native-born) in 1979-1983, 1989-1991, 1999-2001, 2007-2009.

Source: LFS, several years

Table 2 – Difference in employment probability between white natives and ethnic minorities

	1993		2000		2009	
	Men	Women	Men	Women	Men	Women
Black Caribbean	-0.183***	-0.097***	-0.135***	-0.069***	-0.139***	-0.048**
	(0.020)	(0.019)	(0.020)	(0.020)	(0.026)	(0.023)
Black African	-0.323***	-0.248***	-0.175***	-0.215***	-0.120***	-0.254***
	(0.027)	(0.026)	(0.024)	(0.022)	(0.023)	(0.021)
Indian	-0.078***	-0.131***	-0.057***	-0.119***	-0.008	-0.105***
	(0.014)	(0.015)	(0.013)	(0.015)	(0.014)	(0.017)
Pakistani	-0.241***	-0.494***	-0.181***	-0.451***	-0.102***	-0.435***
	(0.020)	(0.015)	(0.018)	(0.017)	(0.019)	(0.019)
Bangladeshi	-0.273***	-0.513***	-0.265***	-0.532***	-0.069**	-0.444***
	(0.035)	(0.026)	(0.032)	(0.025)	(0.030)	(0.030)
Chinese	-0.139***	-0.191***	-0.205***	-0.210***	-0.190***	-0.092***
	(0.033)	(0.034)	(0.036)	(0.036)	(0.038)	(0.034)
Total Difference	-0.172***	-0.230***	-0.138***	-0.224***	-0.082***	-0.220***
(Minority)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.010)
White natives	0.764***	0.667***	0.805***	0.714***	0.766***	0.721***
employment rate	(0.002)	(0.002)	(0.002)	(0.002)	(0.003)	(0.003)

The table reports the difference in employment rate between white natives and each ethnic minority group (or all minority groups), net of seasonality effects, in 1993, 2000, 2009. The values are the estimated coefficients of a regression of a dummy for employment status on ethnicity dummies (omitted category is white natives) and quarter dummies (omitted category is quarter 4). The last row is the coefficient on the constant in the regression, and reports the average employment rate of white natives in the excluded quarter. Regressions are weighted using sampling weights as provided by LFS. Cluster-robust (at the individual level) standard errors are in parenthesis.

Source: LFS, 1993, 2000, 2009

<sup>\*\*\*</sup> significant at 1%, \*\* significant at 5%, \* significant at 10%.

Table 3-Percentage difference in mean hourly wages between white natives and ethnic minorities

Tuble 3-refletituge t	19		1	)00	20	
	Men	Women	Men	Women	Men	Women
			Panel A			
Black Caribbean	-0.189**	0.150***	-0.121***	0.150***	-0.272***	0.068
	(0.074)	(0.042)	(0.037)	(0.035)	(0.078)	(0.050)
Black African	-0.201**	0.249***	-0.100*	0.111***	-0.090*	0.033
	(0.080)	(0.095)	(0.056)	(0.039)	(0.052)	(0.049)
Indian	0.042	0.017	-0.030	0.031	0.144***	0.176***
	(0.038)	(0.038)	(0.035)	(0.030)	(0.043)	(0.038)
Pakistani	-0.291***	0.026	-0.254***	-0.064	-0.258***	-0.071
	(0.069)	(0.076)	(0.046)	(0.051)	(0.068)	(0.050)
Bangladeshi	-0.530***	0.098	-0.496***	-0.219	-0.352***	-0.059
	(0.131)	(0.217)	(0.084)	(0.158)	(0.092)	(0.095)
Chinese	-0.008	0.135	-0.064	0.079	-0.178	0.215***
	(0.149)	(0.147)	(0.095)	(0.074)	(0.122)	(0.082)
Total Difference	-0.116***	0.095***	-0.125***	0.061***	-0.077***	0.096***
(Minority)	(0.030)	(0.026)	(0.021)	(0.019)	(0.028)	(0.023)
		•	Panel B	•		•
Black Caribbean	-0.271***	-0.044	-0.240***	-0.015	-0.386***	-0.100**
	(0.075)	(0.041)	(0.037)	(0.034)	(0.074)	(0.051)
Black African	-0.318***	0.014	-0.292***	-0.126***	-0.250***	-0.124**
	(0.083)	(0.092)	(0.059)	(0.041)	(0.056)	(0.049)
Indian	-0.025	-0.110***	-0.131***	-0.106***	0.066	0.077**
	(0.039)	(0.037)	(0.036)	(0.031)	(0.043)	(0.038)
Pakistani	-0.307***	-0.020	-0.313***	-0.132***	-0.300***	-0.135***
	(0.068)	(0.072)	(0.044)	(0.051)	(0.066)	(0.047)
Bangladeshi	-0.645***	-0.125	-0.636***	-0.319**	-0.434***	-0.188**
	(0.135)	(0.231)	(0.087)	(0.157)	(0.090)	(0.093)
Chinese	-0.101	0.051	-0.180**	-0.041	-0.255**	0.074
	(0.144)	(0.138)	(0.092)	(0.073)	(0.113)	(0.072)
Total Difference	-0.186***	-0.061**	-0.238***	-0.090***	-0.165***	-0.025
(Minority)	(0.030)	(0.026)	(0.021)	(0.019)	(0.029)	(0.025)
	(,	( /	Panel C	( /	(,	( )
Black Caribbean	-0.233***	-0.070*	-0.238***	-0.020	-0.335***	-0.083*
	(0.074)	(0.039)	(0.037)	(0.028)	(0.077)	(0.047)
Black African	-0.496***	-0.198**	-0.457***	-0.292***	-0.394***	-0.265***
	(0.094)	(0.094)	(0.060)	(0.042)	(0.054)	(0.052)
Indian	-0.198***	-0.208***	-0.260***	-0.196***	-0.096**	-0.080**
	(0.038)	(0.035)	(0.031)	(0.028)	(0.037)	(0.034)
Pakistani	-0.347***	-0.076	-0.375***	-0.150***	-0.352***	-0.152***
	(0.061)	(0.084)	(0.043)	(0.049)	(0.063)	(0.046)
Bangladeshi	-0.712***	-0.201	-0.628***	-0.313*	-0.454***	-0.136
. 0	(0.121)	(0.282)	(0.088)	(0.169)	(0.090)	(0.091)
Chinese	-0.392***	-0.189	-0.297***	-0.247***	-0.411***	-0.087
	(0.131)	(0.145)	(0.092)	(0.070)	(0.109)	(0.062)
Total Difference	-0.291***	-0.153***	-0.324***	-0.164***	-0.270***	-0.123***
(Minority)	(0.029)	(0.025)	(0.020)	(0.018)	(0.027)	(0.022)
White natives mean	2.070	1.771	2.178	1.919	2.331	2.131
_	(0.585)	(0.539)	(0.596)	(0.545)	(0.598)	(0.540)
log wages	(0.365)	(0.339)	(0.390)	(0.343)	(0.330)	(0.340)

The table reports the percentage mean hourly wage differences between white natives and each ethnic minority group (or all minority groups), net of seasonality effects, in 1993, 2000, 2009. The values are the estimated coefficients of a log-wage regression on ethnicity dummies (omitted category is white natives) and quarter dummies (omitted category is quarter 4). Panel A controls for seasonality; panel B additionally controls for region of residence (omitted category Is Greater London); panel C controls additionally for age, age squared and education dummies (omitted category is low education). The last row reports the mean and standard deviation of log-wages for white natives. Wages are discounted using the 2005 based CPI. Regressions are weighted using income weights as provided by LFS. Robust standard errors are in parenthesis.

<sup>\*\*\*</sup> significant at 1%, \*\* significant at 5%, \* significant at 10%. Source: LFS, 1993, 2000, 2009

Table 4 - Percentage difference in mean hourly wages between white natives and second generation ethnic minority immigrants

mmigrant groups Birth cohort 1963-1975 observed in 1998-2009 (Minorities: all British born)				
	(1)	(2)	(3)	
	Total	Men	Women	
		Panel A		
Black Caribbean	0.011	-0.097***	0.131***	
	(0.013)	(0.022)	(0.016)	
llack African	0.094***	-0.017	0.212***	
	(0.028)	(0.043)	(0.033)	
ndian	0.086***	0.050**	0.127***	
	(0.015)	(0.023)	(0.021)	
akistani	-0.008	-0.080**	0.064**	
	(0.026)	(0.040)	(0.032)	
angladeshi	0.074	0.005	0.126	
	(0.105)	(0.153)	(0.107)	
hinese	0.171***	0.111	0.240***	
	(0.057)	(0.070)	(0.089)	
otal Difference	0.048***	-0.027*	0.133***	
Minority)	(0.009)	(0.014)	(0.011)	
White natives	2.015***	2.107***	1.910***	
	(0.004)	(0.006)	(0.006)	
	, ,	Panel B	,/	
lack Caribbean	-0.002	-0.098***	0.102***	
olack Calibbeati	(0.013)	(0.021)	(0.015)	
Black African	-0.081***	-0.204***	0.049	
olack Afficati	(0.027)	(0.039)	(0.035)	
ndian	-0.042***	-0.084***	0.008	
idiaii	(0.014)	(0.020)	(0.017)	
akistani	-0.119***	-0.209***	-0.014	
akistaili			(0.028)	
angladachi	(0.023) -0.071	(0.035) -0.098	-0.070	
Bangladeshi	-0.071 (0.082)			
hinasa	-0.019	(0.118) -0.047	(0.085) 0.017	
Chinese	(0.051)	(0.070)	(0.070)	
			, ,	
otal Difference	-0.037***	-0.116***	0.051***	
Minority)	(0.008)	(0.013)	(0.010)	
Vhite natives	2.532***	2.630***	2.414***	
	(0.005)	(0.007)	(0.007)	
		Panel C		
lack Caribbean	-0.070***	-0.158***	0.027*	
	(0.012)	(0.021)	(0.015)	
lack African	-0.176***	-0.285***	-0.057	
	(0.027)	(0.038)	(0.035)	
ndian	-0.076***	-0.111***	-0.032*	
	(0.013)	(0.020)	(0.017)	
akistani	-0.122***	-0.203***	-0.028	
	(0.023)	(0.035)	(0.028)	
angladeshi	-0.131	-0.147	-0.139	
	(0.082)	(0.117)	(0.086)	
hinese	-0.056	-0.093	-0.012	
	(0.050)	(0.068)	(0.071)	
otal Difference	-0.088***	-0.158***	-0.008	
Minority)	(0.008)	(0.013)	(0.010)	
Vhite natives	2.642***	2.727***	2.531***	
	(0.006)	(0.008)	(0.008)	

The table reports percent differences in real hourly wages between British born ethnic minorities and white natives. Standard errors are in parentheses. Reported coefficients in Panel A are conditional on year and quarter dummies (omitted categories year 1998 and quarter 4). Reported coefficients in Panel B are conditional on years and quarter dummies, age and age square, high education, intermediate education (omitted category, low education). Reported coefficients in Panel C are conditional on year and quarter dummies, age, age square, high education, intermediate education and region dummies (omitted category Greater London). The last row of each panel is the coefficient on the constant in the regression, and reports the average log-wages of white natives in the excluded category. Regressions are weighted using income weights as provided by LFS.

Source: LFS, 1998-2009.

<sup>\*\*\*</sup> significant at 1%, \*\* significant at 5%, \* significant at 10%.

Table 5 - Ethnic Test Score Gaps at School Entry

	Vocabulary	Pictures	Patterns
Black, Caribbean	-6.608	1.841	-2.677
	(0.925)	(1.369)	(0.844)
Black, Other	-10.579	-0.893	-4.948
	(0.789)	(0.590)	(0.910)
Bangladeshi	-15.135	-3.655	-5.391
	(0.705)	(0.643)	(0.502)
Pakistani	-15.513	-2.837	-4.868
	(0.855)	(1.167)	(0.815)
Indian	-6.177	0.312	-0.992
	(0.944)	(0.739)	(0.628)
Chinese	-6.437	5.208	4.332
	(4.310)	(2.861)	(1.750)
Other	-4.213	0.618	-0.967
	(0.727)	(0.531)	(0.530)

The table shows achievement gaps at age 5 (before the start of school) between ethnic minorities and the White British in three tests: naming vocabulary test, picture similarity test, and pattern construction test. Source: Millennium Cohort Survey (MCS), age 5.