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Article

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Journal for Labour Market Research

Provided in Cooperation with:
Institute for Employment Research (IAB)

Suggested Citation: Bidisha, Sayema H.; Das, Anupam; McFarlane, Adian A. (2013) : Microeconometric analysis of earnings mobility of immigrants and ethnic minorities: evidence from the UK, Journal for Labour Market Research, ISSN 2510-5027, Springer, Heidelberg, Vol. 46, Iss. 1, pp. 35-42, https://doi.org/10.1007/s12651-012-0110-1

This Version is available at:
https://hdl.handle.net/10419/158788

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J Labour Market Res. (2013) 46:35–42
DOI 10.1007/s12651-012-0110-1

ARTICLE

Microeconometric analysis of earnings mobility of immigrants and ethnic minorities: evidence from the UK

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Accepted: 7 August 2012 / Published online: 11 September 2012
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Abstract This paper analyzes intergenerational earnings mobility of immigrants and ethnic minorities in the UK. We use a two-sample technique and utilize the British Household Panel Survey for estimating the mobility coefficient. The estimation provides the evidence of differences in generational mobility based on immigration status and ethnic origin. Earnings of the native population tend to have a strong correlation with that of their fathers, a mobility coefficient of 0.34. However, for immigrants as well as ethnic minorities, the fathers' earnings have a smaller impact on childrens' earnings with a much lower coefficient estimate.

Mikroökonometrische Analyse der Einkommensmobilität zwischen Generationen bei Immigranten und ethnischen Minderheiten: Empirische Befunde aus Grossbritannien

Zusammenfassung Dieses Manuskript analysiert intergenerationelle Einkommensveränderungen von Immigranten und Minderheiten in Grossbritannien. Wir wenden eine Zwei-Stichproben-Technik an und nutzen das *British Household Panel Survey* (BHPS), um den Mobilitätskoeffizienten zu berechnen. Das Ergebnis zeigt, dass Unterschiede bei Einkommensveränderungen zwischen zwei Generationen vorhanden sind, je nach Immigrationsstatus und ethnischer Herkunft. Das Einkommen der einheimischen Bevölkerung hängt tendenziell stark vom Einkommen des Vaters ab, der Mobilitätskoeffizient liegt bei 0.34. Bei Immigranten und ethnischen Minderheiten hingegen hat das Einkommen des Vaters einen geringengeren Einfluss auf das Einkommen der Kinder, der Koeffizient liegt wesentlich niedriger.

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1 Introduction

Income inequality has risen in many industrialized countries since the mid-1970s (Brandolini and Smeeding 2009). It is often assumed that such an increase is due to the changes in wage and institutional structures (Corak 2004) and returns to education and skill (Gottschalk and Smeeding 1997; Katz and Autor 1999). These factors may have caused important alterations to the earnings profile over time, with the result that a child in her generation's earnings distribution could be quite different from that of her parent. Economists have also long argued that parental income plays an important role in determining the potential income of children (Behrman and Taubman 1990). It is therefore an important policy issue to understand the extent to which family background influences the potential income of children and the way earnings patterns have changed over generations.

The term intergenerational mobility refers to the relationship between the socio-economic status of parents, particularly income, and the status of children when they become adult (Corak 2004). The issue of generational mobility is very important when considered in the context of immigrants or ethnic minorities. Immigrants often are unable to

transfer their education received in their home countries because of discrimination, lack of good networking skills, and language difficulty in the labour market. All these attributes could easily be transmitted to the next generation. As for ethnic minorities, discrimination in the labour market, unobservable features related to skill or earnings (e.g., certain ethnic groups might have comparative advantage over other groups in performing certain tasks), certain cultural and social norms influencing earnings capacity (people of certain ethnic groups might be prejudiced against certain types of education or jobs) may result in differences in the intergenerational mobility from that of the native ethnic group. The issue of intergenerational mobility of ethnic minorities in this aspect could represent the performance of the second generation (non-native) immigrants as opposed to the children of the native population.

The growing inequality in recent decades, along with the increased presence of immigrants from different backgrounds and skill mix has made the UK an intriguing case to study. The question that arises is: do immigrants and ethnic minorities show similar generational mobility to that of the native population? While this question is important, research on it is conspicuously deficient. The existing literature tends to focus on the performance of current immigrants and analyzes the intergenerational mobility at a specific point in time. Nevertheless, the economic performance of immigrants can be better understood from a longer-term dimension while analyzing the assimilation of immigrants. Moreover, the issue of equal opportunity in the host country can best be addressed from an intergenerational viewpoint.

In a recent study, Dustmann and Theodoropoulos (2010) conclude that ethnic minority immigrants and their children are on average better educated than their native peers although members of the ethnic minorities do not have higher employment probabilities. Using the Michigan Panel Study of Income Dynamics (PSID), both Solon (1992) and Zimmermann (1992) provide evidence on the correlation between father's income and son's income. In both cases, the estimated coefficient is approximately 0.40. Aydemir et al. (2009) conclude that fathers' earnings can explain only 18 to 27 percent of the earnings of second generation immigrants in Canada. On the contrary, Borjas (1993) finds a significant positive relationship between the earnings of the first and second generation immigrants in the US. This result is supported by Card et al. (2000) who find a high intergenerational income correlation for immigrants. This magnitude of this correlation lies within the range of 0.40 to 0.60. Research on Britain also indicates similar results. Dearden et al. (1997) use the National Child Development Survey data set and find that the coefficients of parent's earnings (β) range from 0.40 and 0.60 for men and 0.45 to 0.70 for women. Ermisch and Francesconi (2004) use the British Household Panel Survey (BHPS). Their findings suggest that the coefficients for father-child mobility and mother-child mobility range from 0.45 to 0.75 and 0.30 to 0.50 respectively. Nicoletti and Ermisch (2008) have also used the same dataset. They conclude that the intergenerational mobility did not change significantly across cohorts from 1950 to 1960; however, a negative trend in mobility was observed during 1961 to 1971.

The existing literature, therefore, suggests a striking difference in intergenerational mobility across countries as well as within countries. From this backdrop, we intend to analyze the issue of intergenerational mobility with particular emphasis on ethnic background and immigration status. To our knowledge, no other study has previously estimated the intergenerational mobility coefficient for different groups for the UK. Hence, our analysis is expected to shed light on the performance of both the first and second generation immigrants and ethnic minorities in Britain.

To estimate the intergenerational mobility coefficient, we use the British Household Panel Survey (BHPS) dataset within the two-sample two stage least square (TS2SLS) framework. To preview, we find that approximately 33–36 percent of native children's earnings can be explained by that of their fathers. For immigrants and ethnic minorities (including all non-Caucasian natives and immigrants), we find the mobility coefficient to be significantly different and much smaller in magnitude. Only 13 percent earnings of the children from immigrant families can be explained by that of their fathers', while the magnitude of the mobility coefficient for ethnic minorities is as low as 0.08.

The rest of the paper is organized as follows. Section 2 introduces the theoretical motivation of this research. Section 3 presents the econometric specification. Section 4 discusses the data and methodological issues. Section 5 presents empirical results and Sect. 6 concludes the paper.

2 Theoretical underpinning

The issue of intergenerational mobility can be modelled in the light of the theories related to human capital investment and intergenerational utility. Based on the theoretical models provided by Becker and Tomes (1979) and Solon (1999), in a family of one parent (let it be the father) and one child, the father's lifetime earnings Y^f is allocated between his own consumption and investment in his child's human capital. The budget constraint for the father can therefore be defined as:

$$Y^f = C^f + I^f \tag{1}$$

where C^f is the own consumption of the family and I^f is the investment in child's human capital. Childrens' earnings is a function of the investment made by the father along with all other factors that could influence earnings.

$$Y^c = (1 + r)I^f + E^c \tag{2}$$

where r is the return to investment in human capital and E^c includes all other factors. The father maximizes a Cobb-Douglas utility function of the following form:

$$U = (1-\gamma)\log C^f + \gamma \log Y^c \tag{3}$$

where γ $(0 < \gamma < 1)$ indicates the weight that the father attaches to the earnings of the child (therefore, investment on the child) relative to his own consumption. Maximizing the utility function, and arranging the terms yields the following expression of the child's earnings (Solon 1999):

$$Y^c = BY^f + \gamma E^c \tag{4}$$

where $B = \gamma(1+r)$. In (4), if we assume that the variance of earnings is the same in each generation, then B would represent the correlation between the lifetime earnings of the child and the father. However, it can only be true under the strict condition of orthogonality between E^c and Y^f (Solon 1999). In this respect, Becker and Tomes (1979) and Solon (1999) suggest that E^c can be expressed as a sum of child's endowment (e^c) and other factors that transfer from the family and partially determine the child's earnings capacity (u^c). e^c is unconditional of, I^f and u^c include features that are not otherwise included in E^c and Y^f. Solon (1999) refers u^c as *market luck*.

$$E^c = e^c + u^c \tag{5}$$

where e^c is composed of features such as race, family culture, caste, reputation and connection of families (Becker and Tomes 1979). It could be thought to follow the first order autoregressive process:

$$e^t = \lambda e^{t-1} + v^t \tag{6}$$

where $0 \le \gamma \le 1$ and v^t is serially uncorrelated. In this set up, intergenerational earnings correlation can be expressed in the following manner (Solon 1999):

$$Y^t = BY^{t-1} + \gamma e^t + \gamma u^t \tag{7}$$

where $0 < B < 1$ and the population variances of u^t and e^t are respectively σ_u^2 and $\sigma_e^2 = \frac{\sigma_v^2}{(1-\lambda^2)}$. Depending on the values of intergenerational correlation in two extreme cases, i.e. when $\sigma_u^2 = 0$ and when $\sigma_e^2 = 0$, the intergenerational earnings correlation is suggested as a weighted average of these two cases.

Therefore, the degree of intergenerational mobility is determined by several factors: the importance that fathers attach to investment in children, the return to investment in human capital, the degree of correlation between children and fathers' endowments of earnings capacity, and the relative magnitudes of the variances of luck in market as well as in their endowment (Solon 1999: 1766). In this set up, the issue of immigration and ethnicity is expected to play important roles in the intergenerational earnings mobility model through several avenues: (i) if immigrant and ethnic minority fathers have high (low) weights to the investment in children (γ); (ii) if immigrant and ethnic minority fathers are less acquainted about the education system, have difficulty in language, prefer certain ethnic schooling system, lack good networking, prejudiced against certain education we may observe lower mobility coefficient; (iii) certain immigrant or ethnic communities may have better (worse) unobservable characteristics (ability, skill, motivation etc.) which could lead to high (low) intergenerational correlation; (iv) childrens' endowments are partially determined by their fathers' endowments and certain genetic, cultural, family or ethnic characteristics (e.g. entrepreneurial skill, talents related to certain occupations, certain cultural/social norms associated with earning capacity) might be transmitted from immigrant fathers to the next generation through the correlation of endowments of capacities (λ). However, such an effect may fade away in the next generation and it may not be influential for the children; (v) if immigrants and ethnic minorities are discriminated (u^c) in the labour market then we may expect a higher intergenerational correlation of earnings. If discrimination is based on certain ethnic attributes such as race, it is expected to persist over generations. (vi) if immigrant and ethnic minority fathers have received education abroad but their children receive it in the host country, the formers' earnings could be affected by imperfect information of their educational qualification and that may not prevail for the latter. In such a case we expect a low mobility coefficient.

3 Econometric specification

The literature on intergenerational mobility primarily estimates an earnings equation of children with fathers' earnings being the key explanatory variable. Therefore the following equation is estimated to capture intergenerational mobility:

$$Y_i^c = \alpha + \beta Y_i^f + \kappa X_i + \omega_i \tag{8}$$

where Y_i^c is the logarithm of the permanent income of children who belong to family i, α is the intercept term, Y_i^f is the log of fathers' permanent income, X_i is the vector of other explanatory variables. β is the coefficient of our interest variable. The coefficient β can be interpreted as a type of convergence rate and can be considered as an indicator of social mobility. The value of β being 1 implies one-to-one relationship between fathers and childrens' earnings suggesting a 1 dollar increase in fathers' earnings will be translated into a 1 dollar increase in that of child. On the other hand, if the value of β is 0, then the earnings of the children are determined solely by their own characteristics.

Equation (8) can be estimated by the ordinary least square technique (OLS) if the data on permanent income

of both fathers and children are available. The key constraints, however, are two-fold: (i) lack of information of both fathers and childrens' earnings in the same data set and (ii) absence of any information of permanent income. If we consider only the current income and ignore the permanent income; this may cause a downward inconsistency of the β coefficient (Lefranc and Trannoy 2005; Bjorklund and Jantti 1997). Hence, the current income of father is instrumented in order to account for the life cycle biases. Following Haider and Solon (2006), we choose individuals within a specific age range in order to minimize the biases.

As discussed by Ridder and Moffitt (2007), the issue related to the missing data (here, fathers' earnings) problem can be addressed by the two stage instrumental variable (2SIV) technique, which is considered as an imputation estimator (Ridder and Moffitt 2007). Nicoletti and Ermisch (2008) argue that the instrumental variable estimator is numerically identical to the two stage least squares and in the context of two-sample, the latter is comparatively easier in terms of computation. In such a situation, the endogenous variables are replaced by the predicted value of the missing variable. Nicoletti and Ermisch (2008) apply the two-sample two-stage least squares (TS2SLS) method to address the issue of intergenerational mobility. Therefore, we follow Nicoletti and Ermisch (2008) and apply the TS2SLS for estimating mobility parameters. According to the TS2SLS, let us assume Z_i^f is a set of socio-demographic characteristics of fathers from family $i \in I$ (I is labelled as the main sample). Although both Z_i^f and Y_i^c are observed in I, Y_i^f is not. If there is a sample J (defined as the supplement sample) originated from the same population as I and contains information of Z^f, predicted value of Y^f can be obtained and the following model of Y^f can be estimated on sample J:

$$Y_{ji}^f = \gamma Z_j^f + \mu_j^f + u_{ji}^f \tag{9}$$

where $j \in J$. In this framework, (8) can be estimated in the following manner:

$$Y_{it}^c = \alpha + \beta\left(\hat{\gamma} Z_i^f\right) + \kappa X_{it} + \varepsilon_{it} \tag{10}$$

where

$$\varepsilon_{it} = \omega_{it} + u_{it}^c + \beta\mu_i^f + \beta\left(\gamma Z_i^f\right) - \beta\left(\hat{\gamma} Z_i^f\right) \tag{11}$$

In this analysis, the supplement sample is utilized to estimate a log earnings equation for father (9). In the next step, the intergenerational mobility equation (8) is estimated while using the main sample but by replacing fathers' earnings by its predicted value obtained in the first stage. In case of the two-stage least square, the standard errors are incorrect and in order to get the correct standard error a bootstrapping procedure has been followed. As we use two separate samples for estimating the first and second stage regressions, the bootstrapping is done in a way that the predicted values obtained in the first stage are explicitly taken into account while bootstrapping the second stage estimates.

4 Description of data

One crucial constraint of analyzing generational mobility of immigrants is the lack of datasets with information on both fathers' and childrens' earnings. The two widely used datasets, the National Child Development Survey (NCDS) and the British Cohort Survey (BCS), although they contain information on earnings of a father-child pair, they do not have information on country of birth. The alternative is to use a nationally representative survey, the British Household Panel Survey (BHPS). In this research endeavour, the BHPS from 1991–2005, which consists of around 5500 households covering more than 10,000 individuals each year has been utilized. The BHPS is a longitudinal data set ranging from 1991 to date. As discussed by Ermisch and Francesconi (2004), the BHPS has several advantages over other data sets utilized for analyzing intergenerational earnings mobility: (i) it is more of a recent data set; (ii) the BHPS has more detailed information on parents' earnings; (iii) the BHPS is expected to be less affected by sample homogeneity bias (Ermisch and Francesconi 2004). In addition, the BHPS does not suffer from serious form of attrition bias. Another advantage of the BHPS for our analysis is that it contains information of respondent's country of birth and ethnicity, which allows us to distinguish them based on immigration status or ethnic background. Although the BHPS does not have information on respondent's fathers' earnings, they were asked different questions about their fathers' socio-demographic characteristics. These are used to predict fathers' earnings.

To estimate the mobility coefficient, the sample (the BHPS) is divided into two parts: the main and the supplement sample. In the main sample, respondents (both sons and daughters) who were born between 1946 and 1974 and whose fathers' year of birth ranges from 1905 to 1945 are included. In addition, only the wage employed and the self-employed people with positive earnings and working full time are considered as candidates for the main sample. In order to control for the problem of life cycle bias, those aged between 31 and 45 with fathers aged between 31 and 55 (when the respondent was 14 years old) are chosen. Earnings and age variables represent the average of these variables over the chosen period. Finally, in order to avoid any repetition, individuals are considered once when they first appear in the panel. For the supplement sample, a sample comprising the *synthetic* fathers of these children is considered. We include those men who were born between 1905 and 1945 in the wave one (year 1991) of the BHPS. They are also restricted to the wage employed and the self-employed with positive earnings.

In the supplement sample, fathers' socio-demographic characteristics (e.g. age, education, etc.) are observed. These characteristics are then utilized to construct their (synthetic fathers') earnings. Information on the same socio-

Table 1 Descriptive statistics

	(1) Fathers' own report of characteristics	(2) Childrens' report of fathers' characteristics	(3) Childrens' own characteristics
Relevant sample	Supplement	Main	Main
No. of observation/person	935	3823	3823
Mean monthly earnings (£)	1624	1560[a]	1729
Mean age (year)	53.94		38.23
Mean age when son is 14		43.71	
Mean HG score	48.68	46.75	50.59
% of people without education	35.98	46.01	8.86
% of people with mid level education	33.51	46.56	40.34
% of people with high education	30.50	7.44	50.80
% of people self employed	24.28	16.95	11.01
% of people wage employed			88.99
% of people unskilled	19.16	27.30	12.99
% of people skilled	34.58	38.25	48.23
% of people professional	21.95	17.49	26.57
% of immigrant	5.28	7.68	5.27
% of Caucasians	96.89		96.99
% of non-Caucasians	3.11		3.01
% of Caucasian native	93.94		93.47
% of Caucasian immigrant	2.87		3.38
% of non-Caucasian native	0.64		1.13
% of non-Caucasian immigrant	2.43		1.89

[a]Fathers' earnings are predicted earnings

demographic characteristics of respondents' fathers is given in the main sample. Hence, fathers' earnings in the main sample can be predicted by combining information of (a) fathers' earnings from the supplement sample, and (b) fathers' socio-demographic characteristics reported in the main sample.

Age, age square, two cohort dummies (cohort one if born between 1905 and 1934 and cohort two if date of birth falls within 1935 and 1945) and the interaction of cohort dummies with Hope-Goldthorpe score are considered as explanatory variables in the fathers' earnings equation. In addition, the interaction of cohort dummies with three dummies of educational qualifications (no education, mid education and high education) and interaction of cohort dummies with three types of occupation (self employed, professional, skilled and unskilled) are incorporated. Finally, dummies are used to indicate immigration status and two broad ethnic backgrounds: Caucasians and non-Caucasians. The non-Caucasians group comprises of black, south Asian, Chinese, mixed and other ethnicities. The dependent variable, the monthly gross payment of wage, salary or self-employment income is deflated by the consumer price index and is expressed in 2005 British pounds.

5 Empirical analysis

5.1 Descriptive statistics

Column 1 of Table 1 presents fathers' characteristics from the supplement sample. Childrens' reports on fathers' characteristics are given in the second column. Column 3 depicts children's characteristics from the main sample.

From column 3, the main sample has 3823 individuals with the mean age of 38 years. Approximately 5 percent are immigrants, 97 percent are Caucasians, and 3 percent non-Caucasians including black, south Asian, mixed, and other ethnic groups. Around half of the employed people of this sample are skilled and one-third of them work in professional occupations. On average, children earn around £1729 per month. This sample is used to estimate the intergenerational mobility equation.

The main sample is also utilized to predict fathers' earnings while using childrens' reports of their fathers' characteristics as instruments (column 2). Fathers' Hope-Goldthorpe (HG) score from their childrens' reports is around 47 which is also close to the actual HG score of

Table 2 Estimation results of intergenerational mobility coefficients

	(1) Main model	(2) Male	(3) Female	(4) Ethnic minorities
Age	−0.067	−0.063	−0.053	−0.057
	(1.11)	(0.77)	(0.58)	(0.90)
Age square	0.001	0.001	0.000	0.001
	(0.88)	(0.71)	(0.34)	(0.71)
Immigrant	1.630*	1.569	1.943	
	(1.73)	(1.26)	(1.35)	
Non-Caucasian				1.983***
				(1.93)
Male	0.389***			0.381***
	(21.02)			(21.50)
Ln earnings father	**0.343*** **	**0.330*** **	**0.362*** **	**0.351*** **
	(5.93)	**(5.78)**	**(4.88)**	**(7.37)**
Ln earnings father*Immigrants	−0.217*	−0.214	−0.255	
	(1.69)	(1.25)	(1.30)	
Ln earnings father*Non-Caucasians				−0.265*
				(1.84)
Constant	6.162***	6.398***	5.936***	5.884***
	(4.99)	(4.09)	(3.24)	(4.82)
Number of observations	2469	1339	1130	2580
R-Squared	0.194	0.055	0.089	0.192

t-statistics in the parenthesis
***, ** and * imply 1 %, 5 % and 10 % level of significance respectively

49 reported by the fathers themselves.[1] However, discrepancies between childrens' reports and their fathers' reports are found in the level of education and occupational categorization. The predicted value of fathers' earnings based on the instruments reported by the child is £1560, which is found to be lower than the actual reported earnings of £1624.

Theoretically, it would be ideal to run separate regressions and estimate mobility coefficients for both natives and immigrants. One of the challenges of estimating the mobility coefficient is the then smaller sample size. Due to the smaller number of observations, it was not possible to estimate the intergenerational mobility coefficient for each subgroup of immigrants and ethnic minorities separately. This problem becomes more severe when the supplement sample is taken into consideration. The supplement sample is not large enough to extend the analysis further.

5.2 Estimation of the mobility coefficient

Table 2 summarizes the main results from the second stage of the estimation of the intergenerational mobility coefficient. The first stage regression results of fathers' earnings equation are shown in the Appendix. The second stage model including the immigration dummy as the relevant covariate is shown in column 1 of Table 2. Results suggest that the earnings of native-fathers have a strong positive impact on childrens' earnings profiles. The mobility coefficient is 0.34, which is consistent with other studies of the UK (Dearden et al. 1997; Ermisch and Francesconi 2004). The mobility coefficient for immigrants is quite small with a magnitude of 0.13 though the interaction term is significant only at the 10 percent level. Therefore, although fathers' earnings can explain around one-third of the earnings for native people, it seems to play a less important role for immigrants. Hence, offspring of poor immigrants are expected to be able to encompass their background and to perform better than their fathers in terms of the earnings. This low mobility coefficient of immigrants is not supported by the studies done in the US (Borjas 1993; Card et al. 2000) but is consistent with the findings on Canadian immigrants by Aydemir et al. (2009).

Based on the theoretical model, several possible explanations of the mobility coefficient of immigrants could be considered. (1) Immigrant fathers might give low weight to the investment in children (γ) resulting in low intergenerational correlation. Even with the same level of investment as that of natives, immigrant children might have lower returns to education (r). Migration is a family investment decision. If the initial cost of migration is too high (which is often the

[1] The Hope-Goldthorpe scale is a classification system for measuring social or occupational status (Goldthorpe and Hope 1974). This index ranges from 17.52 to 82.05 with a higher value indicating greater occupational prestige. For example, the highest value of 82.05 could be attached with highly prestigious occupations e.g. self-employed doctors, lawyers etc. whereas the score of 17.52 is related to occupations like gardeners or street vendors. For the sake of ease in analysis, it has been classified into 36 categories.

case for many families who migrate from poor countries), it is possible that the migrant family will put low weight on their children. In other words, large short run migration cost simply overweighs the potential long run benefit of investing on childrens' future. (2) The labour market is equitable and discrimination free and education is transferable and (3) the cultural/ethnic effect that could have negatively influenced the earnings capacity of the immigrant fathers fades away for children. It is highly likely that immigrant children are exposed to the dominant native language and culture, which help them to acquire the necessary skill for the labour market. On the other hand, migrant fathers would not have been as exposed to the host country's language and culture at a young age. Moreover, if they are being exposed to people of the same background, "it is quite likely to inhibit the accumulation of skills required to succeed in the larger labour market" (Warman 2007: 414).

For natives, fathers-daughters intergenerational correlation appears to be stronger than for fathers-sons pairs, although both are statistically significant and quite close in terms of the magnitudes (column 2 and column 3). Results for immigrants again show insignificant and weak effects of fathers' earnings for both sons and daughters.

As shown in column 4, fathers' earnings have smaller effects on childrens' earnings for ethnic-minorities. The mobility coefficient is 0.08 implying high earnings mobility for ethnic minorities (i.e., non-Caucasians) in comparison to their Caucasian counterparts. Therefore, fathers' earnings are virtually immaterial for ethnic minorities. As previously defined, ethnic minorities include the first generation non-Caucasian immigrants and the non-Caucasian natives. In the former case, their low mobility coefficient can be explained in a similar manner as that of immigrants (column 1). Alternatively, if they are non-Caucasian natives (born in the UK), they could be considered as the second or higher generation immigrants and for this group, greater assimilation to the host country, better transferability of education and skill to the job market may especially act behind their low generational correlation of earnings.

6 Conclusion

Given that immigrants and ethnic minorities are likely to have differences in preference patterns and socio-economic structures, they could have different earnings mobility than natives and Caucasians. Hence, not surprisingly, the empirical evidence on generational mobility across countries has provided interesting divergences. The existing literature has found lower intergenerational correlation of earnings in Canada and Nordic countries and lower social mobility in the US and the UK. To that end, it is interesting to analyze if the immigrants and ethnic minorities in the UK show similar generational mobility to that of the native and Caucasian people.

In this paper, intergenerational earnings mobility of immigrants and ethnic minorities in the UK has been examined. For this purpose, the British Household Panel Survey (BHPS) from 1991 to 2005 is utilized and a two-sample two stage least squares method is applied. Estimation results suggest a high intergenerational correlation of earnings for the native people with a mobility coefficient of 0.34. In comparison to the existing literature, this estimate is consistent in its magnitude and provides additional evidence in support of low intergenerational mobility in the UK. The mobility coefficient for immigrants is found to be 0.13, indicating a greater generational mobility of immigrants in comparison to their native peers. In terms of ethnicity, fathers' earnings can explain only around 9 percent of ethnic childrens' earnings. Low generational correlation of the earnings of immigrants contradicts the strong positive association of fathers' and childrens' earnings as found in the US literature. It is however consistent with the literature on Canada, which suggests a high intergenerational mobility of immigrants. Therefore, although the earnings mobility is generally small in the UK, our results suggest that the picture is quite different when we separately look at the mobility coefficient of the ethnic minorities and immigrants.

Overall, these results may be driven by the fact that fathers' socio-economic background is relatively less important for them than for natives and their earnings is determined mainly by their own endowments. Therefore, with high intergenerational mobility, we expect the offspring of poor immigrants to be able to encompass their background and to perform better. That would certainly indicate the immigrants and ethnic minorities are able to improve their position over time, which might be a reflection of more equitable labour market in the host country.

Appendix: Estimation results of 1st stage regression (father's earnings)

Dependent variable: Ln earnings	
Variables	Coefficients
Age	0.181***
	(3.69)
Age square	−0.002***
	(4.66)
Immigrant	0.124
	(0.97)
Non-Caucasians	−0.257
	(1.59)
Cohort 2	1.082
	(1.53)
HGS*Cohort 1	0.823***
	(5.76)

Dependent variable: Ln earnings	
Variables	Coefficients
HGS*Cohort 2	0.597*** (5.17)
Professional*Cohort 1	0.526*** (4.16)
Professional*Cohort 2	0.310*** (3.60)
Skilled*Cohort 1	0.421*** (4.27)
Skilled*Cohort 2	0.152*** (2.04)
Unskilled*Cohort 1	0.656*** (5.14)
Unskilled*Cohort 2	0.257*** (2.58)
Mid education*Cohort 1	0.022 (0.24)
Mid education*Cohort 2	−0.040 (0.56)
High education*Cohort 1	0.217* (1.93)
High education*Cohort 2	0.149* (1.93)
Constant	−0.382 (0.25)
Number of observations	866
R-Squared	0.323

t-statistics in the parenthesis

***, ** and * imply 1 %, 5 % and 10 % level of significance respectively

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