# Unequal after all?

## Non-ethnic explanations of ethnic penalties in the labour market

Albert F. Arcarons

Thesis submitted for assessment with a view to
obtaining the degree of Doctor of Political and Social Sciences
of the European University Institute

Florence, 18 December 2017

European University Institute
**Department of Political and Social Sciences**

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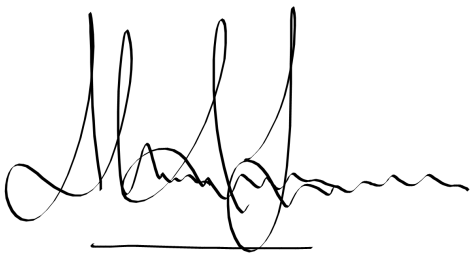

Florence, 17 November 2017

*Per en Lluís, l'Eva,*
*la Iraida, i en Job*

**ABSTRACT**

This thesis is a collection of three empirical studies on the impact of social origin on labour-market outcomes across migration status and ethnic-origin categories. The existence of immigrant and ethnic penalties in the labour market is a recurrent finding. Migration research has, however, drawn little upon social stratification literature, despite sharing common concerns, to explain them. In this thesis, I seek to contribute to bridging the gap between the two disciplines. I pose two overall hypotheses: (i) compositional differences in social background across ethnic-minority groups and natives are likely to explain an important part of labour market penalties; and (ii) the strength of the effect of social origin on destination and its mechanisms of transmission might differ across groups. These hypotheses are tested by first using log-multiplicative layer effect models followed by different specifications of multivariate analyses based on data from *Understanding Society*. The findings show that: (i) class overrides ethnicity in explaining intergenerational mobility, although the strength of the OD association differs by ethnic origin and gender; (ii) labour-force participation is a gendered process with significant differences across migration status and ethnic origin, which are partly explained by the work status of the mother-in-law transmitted through partner/spouse's characteristics; (iii) employment penalties are explained to a large extent by parental work status, education, and age, with variation in the strength of the effect of the last two factors across ethnic origin; and (iv) some groups experience more difficulties than natives with similar class backgrounds in employment as well as access to (and stable placement in) the salariat, although education exerts a compensatory effect. I conclude by arguing that future research should investigate further within-group explanations by deepening in the role of different mechanisms of intergenerational transmission of social (dis)advantage at different levels of the labour market.

**Key words:** social origin, ethnic origin, migration status, gender, labour market.

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During my PhD, I have also worked as a researcher at the Migration Policy Centre (MPC). I joined the MPC to be part of a project on the labour market integration of refugees and asylum seekers in Europe led by Iván Martín and coordinated by Sona S. Kalantaryan. After this project, I stayed at the MPC for about six months working on similar projects. I am very grateful to Iván and Sona for introducing me to this area of research, new to me at that time, and for their kindness and professional advice. I am currently working on a project on this specific topic, and they are always my point of referral when I need advice.

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very happy to get some of his sexy Colombian accent, which now I have already lost. Some days after meeting Juan I met Ludvig. Apart from a classmate, he was also a teammate at the EUI football team. When Juan left for Colombia, he moved in with me in the Via Guelfa's flat, and during the last stages of the thesis he has been my greatest support. It is hard to imagine my experience at the EUI without him. I probably have had more meals with him than with my mother! I am going to miss Ludvig a lot, but I promised that I would visit him in Stockholm when it is not 'frozen'. Quique has also been very close to me during all these years at the EUI. Apart from being a very good and honest friend, he has helped me with my research every time I have needed it. I am very lucky to have him close now in Barcelona, where there is also my Dutch-Latino friend Diederik, an incredible person I also met at the EUI. Diderik and I work now in the same research centre in Barcelona, his office is two floors above mine. Anna, Carolina, my beloved Caterina, Ilaria(s), Jonathan, Javier, Laia, Laura, Pablo, Vivian, Virgi, Maca, Irene, and many others have also contributed to make my stay at the EUI a much better one. With Carlos, Diederik, Francesco, Ludvig, and Pablo, among others, we managed to win the Coppa Pavonne —the annual football tournament of the university— in June this year (our last chance). This achievement is without any doubt one of the most important highlights of all these years in Florence!

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During the last year of the PhD, I was extremely lucky to live in a beautiful flat in the city centre with three amazing Italian young women: Rita from Calabria, and Sara and Silvia from the Tuscany. Apart from more practical issues such as them being determinant for the improvement of my Italian (much needed), even teaching me how to differentiate between all the different beautiful regional accents, they provided the perfect balance I was looking for between academia and the 'outside world'. I am going to miss them a lot, and I will always

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# CHAPTER 1. INTRODUCTION

"The class gap has been growing within each racial group, while the gaps between racial groups have been narrowing."

Robert D. Putnam,
*Our Kids. The American Dream in Crisis*

"Inequality has increased dramatically in recent decades. But it has not become more categorical."

Rogers Brubaker,
*Grounds for Difference*

In this thesis, I combine migration and social stratification theories to explain immigrant and ethnic origin differentials in the labour market. More specifically, I look at different ways in which the characteristics and behaviour of the previous generation might affect the labour-market outcomes of its offspring, and discuss the extent to which this sheds new light on the debate on the existence and explanation of so-called ethnic-origin penalties and premiums in the labour market.

In what follows, and by way of introduction, I discuss and take a stance on four interrelated issues that in my view are among the most challenging and pressing in current migration research. Building on recent developments in the field, my positioning on these issues will inform the analyses and the substantive interpretation of the results obtained. I then introduce the case of the United Kingdom and argue why it is an appropriate case for the research questions this thesis poses. This is followed by a discussion on the research strategy, and finally I present the structure of the thesis and comment on the content of its chapters.

## 1.1 Towards a non-ethnic explanation of labour market disadvantage

*The puzzle of immigrant and ethnic effects*

Differentials between immigrants and their native-born children (or even grand-children) and non-immigrants in educational and labour-market outcomes —i.e. gross immigrant effects— are a well-known empirical regularity in Western economies (Ballarino and Panichella 2013; Crul and Vermeulen 2003; Heath and Cheung 2007; Heath, Rothon, and Kilpi 2008). After controlling for different socio-economic factors in multivariate models —usually education, age, and marital status—, the interpretation and explanation of the remaining residual is one of

the most contested issues in the literature. This residual is often thought as a 'net ethnic/immigrant effect', and in the context of the labour market is usually conceptualized as an ethnic penalty or premium, depending on whether there is a significant negative or positive difference with respect to natives on a given outcome (Heath and Ridge 1983). This empirical regularity is supported by a vast amount of descriptive evidence in the literature. Nevertheless, the sociological explanation of the underlying processes of whether, why and how this ethnic residual exists and persists over immigrant generations and across national contexts remains unclear. Discrimination-based accounts often fall short in providing a convincing explanation, while culturalist approaches have proven unsatisfactory.

In this thesis, I seek to explain differences between immigrants – and particularly immigrant descendants – and natives in labour-market outcomes using data from the UK Household Longitudinal Study (UKHLS), most commonly known as *Understanding Society*.[1] My preliminary inquiry concerns whether immigrants under- or outperform natives in different labour market indicators, and if so by how much. If a significant differential is found, the question that follows is 'why is that the case?' In answering this, other important questions arise. Can we divide the immigrant population further in terms of ethnicity and talk about ethnic-group residuals within it? Are ethnic-origin groups homogeneous enough to be a meaningful comparator, or should we exploit within-group variation instead? If we compare ethnic-origin groups, what is it that explains the observed residuals? Apart from compositional differences across groups, do correlates of labour market participation and attainment operate in the same way for immigrants as for the majority of the population? If not, does this explain the totality, or at least an important part, of the observed ethnic effect? And through which mediating or moderating factors?

*The transnationalism and mobility turns*

Migration is a transnational phenomenon, with origin and destination effects, and should be studied accordingly (Guveli et al. 2016; Levels, Dronkers, and Kraaykamp 2008). As a dual process, it is likely to disrupt categories of reference such as social class, hindering its measurement and interpretation. It is well established that there is selectivity in migration flows (Chiswick 1999). Migrants do not represent a random sample of the population of their respective origin countries, with the first (or parental) generation being often positively

[1] I discuss the characteristics of the data in chapter 2.

selected. It is important to account for the defining characteristics of the subset that leaves, although most of the time these characteristics, such as ambition or higher aspirations/expectations, are unobservable (Borjas 1987, 2014). Those who leave tend therefore to differ or become different from those who stay, their closest or 'true' reference group (Guveli et al. 2016). In sum, selection challenges class-based approaches in the country of destination (Cederberg 2017), and in my view invalidates—at least partly— 'culturalist' approaches to ethnic disadvantage. The latter mainly draw upon ex post explanations based on average characteristics/traits of the population in the country of origin, stressing the notion of 'groupness' to explain behavioural differences at the individual level.

Another, often less discussed, selection process refers to the fact that there might be self-selection in out migration, meaning that 'less successful' migrants —say, in terms of labour-market outcomes— have a higher propensity to leave the destination country (Borjas and Bratsberg 1996; Dustmann 2008). The implications of selective emigration are however less clear than in the case of selective inflows, as it is more difficult to know whether the immigrants that remain are the 'successful' or the 'unsuccessful' ones —i.e. positively or negatively selected, respectively. Therefore, it is usually assumed that there is no selection in the return of immigrants to either their country of origin or a third country (Ballarino and Panichella 2013). In most cases, the use of cross-sectional data hides the true longitudinal nature of the process (Chiswick, Lee, and Miller 2003). However, selection in outmigration is less of a problem for the study of the second generation, which a priori has more incentives to stay in the host society and higher costs for abandoning it than the more mobile first generation.

*Bringing social stratification and mobility theories back in*

Since the cultural turn in some areas of social sciences in the 1970s, concepts such as culture and identity gained momentum in migration research, with explanations based on social origin that are central to the broader inequality framework nevertheless relegated to secondary position (Brubaker 2015). My overall theoretical approach seeks to contribute to the understanding of ethnic residuals by bringing together social stratification/mobility studies and migration/ethnic research. I argue that the distance between the two disciplines, in spite of their shared concerns such as equality of opportunity and the role of ascriptive characteristics —e.g. race, class, and gender— in affecting life chances in detriment of meritocracy, has limited their scope and explanatory power.

On one hand, mobility studies have focused on social reproduction —or on the changing relationship between social origin and destination— and the mediating and moderating roles of education over time. Mobility research has been mainly concerned in testing whether social fluidity has increased, as predicted by modernization theory, or instead remained constant or even declined over time due to growing inequality. Less attention has been paid however to the impact of migration inflows on the class structure of the host society. Moreover, it has been rarely tested whether the same social reproduction patterns apply equally to natives and migrants and their descendants.

On the other hand, ethnic research has concentrated on ethnic penalties and their evolution over time and subsequent generations for different ethnic groups as predicted by assimilation (AT) and segmented assimilation (SAT) theories, respectively (Alba and Nee 1997; Portes and Zhou 1993). In the context of the labour market, AT is based mainly on human-capital related mechanisms, and refers to the fact that immigrants experience a devaluation of their human capital at arrival which is expected to be compensated over time —as a function of the length of stay in the host country— and/or subsequent generations with investment in new human capital. SAT, based more on social-capital mechanisms, predicts instead a non-linear effect of time on human capital investment and returns by highlighting, among other aspects, the importance of the initial position of immigrants in the host labour market. The latter is typically divided into primary and secondary segments. Immigrants often find work on arrival in the secondary segment and experience greater challenges in moving to the primary segment over time, a pattern that might be also reproduced in subsequent generations (Piore 1979).

From these classical integration theories two main hypotheses derive. On one hand, the 'persistence thesis' defends the existence of a cycle of cumulative disadvantage on the long run across different immigrant generations and ethnic-origin groups due mainly to a disadvantageous start for the first generation. On the other, the amelioration or assimilationist thesis predicts improvement over immigrant generations despite initial disadvantages, which is depicted as a rather linear process as migrants steadily integrate into mainstream society (Ballarino and Panichella 2013; Iganski and Payne 1996, 1999; Iganski, Payne, and Roberts 2001).

Ethnic variation is often equated with ethnic causation neglecting the potential role of key explanatory factors such as class background (Wimmer 2009). Ethnic research has mostly focused on differences between groups and the predictive role of group characteristics on the integration outcomes of the second generation. It has however paid less attention to social class —and other background factors— and gender stratification within groups, assuming

homogeneity in this respect. The omission of social-background measures might have led to misleading conclusions by overestimating ethnic penalties, and therefore over emphasizing differences between, rather than within, groups in the labour market (Li and Heath 2016; Platt 2005; Zuccotti 2014).

We have assisted to the rise and consolidation of an 'over-ethnicized' sociology, which tends to define ethnic groups as culture-bearing collectives and concentrate on the role of ethnic categories and migration/ethnic-specific variables by means of ex post group explanations (Aspinall 2000, 2009; Carter and Fenton 2009; Williams and Husk 2013). When researchers seek an explanation for the disadvantage of either immigrants or ethnics they often complement it with what Cebolla-Boado (2007) defines as 'the ethnic dimension'. As Platt argues, culture-based accounts frequently invoke 'cultural differences' as an explanation, and thereby run the 'risk of essentializing and decontextualizing ethnicity' (2006:5).

Ethnicity is often seen as an important determinant of individual behaviour, usually perceived as operating through contextual factors such as community structures and social networks (Cebolla-Boado 2007). Important theoretical approaches in the field build on the notion of ethnicity to develop concepts such as 'ethnic capital' (Borjas 1992), or treat ethnicity itself as social capital (Zhou 2005). 'Ethnicity thinking' often translates however into a risk of inferential danger. There is a tendency to grant agency to ethnic groups instead of individuals, incurring in an ecological fallacy by implying that, for example, based on specific summary statistics or averaged coefficients, it is actually (all) Pakistanis that lag behind (all) Indians in a particular labour market outcome (Connolly 2006:240). I support instead the view that by questioning the unit of analysis (i.e. ethnic groups) —in the present case borrowing mainly, but not only, from stratification research— we are in a better position to question the domain of analysis (i.e. ethnicity) (Balibar 2011; Brubaker 2006; Wimmer 2009). According to Boudon (1998), we can only reach a final explanation if we are able to get rid of black boxes. Ethnicity is one of these.

*Compositional and within-group effects within a wider social stratification system*

A well established empirical regularity across host societies is the existence of compositional differences between immigrant and non-immigrant groups in relevant explanatory factors. These translate in compositional effects, which might increase or decrease when we distinguish further by ethnic origin. Differences in composition mostly derive from the unequal average class stratification between groups, and to a large extent explain group differentials in

educational and labour-market outcomes. The higher the homogeneity within groups in the composition of key correlates, the more useful and valid between-group comparisons are (Platt 2011). Compositional effects however tell us little about the experiences at the individual level of immigrants and their offspring within the broader (un)equal social stratification system.

Despite the 'myth of homogeneity' (Aspinall 2009), ethnic-origin groups are heterogeneous, and some even polarized, in the experience of disadvantage. Within-group heterogeneity is therefore not consistent with an understanding of ethnic-origin groups as isolated entities from the 'common experience' of the majority of the population. Thus, different sub-populations within a particular group might have divergent experiences than the average group experience in the labour market or elsewhere—i.e. within-group effects. The experiences of these sub-populations might resemble then more those of persons in a similar position —particularly in terms of class of origin or gender— irrespective of ethnic origin. Thus, there is intersectionality, as ethnic differences are mediated or compounded by other potential correlates of inequality. It is therefore important to understand the experiences of these sub-groups in relation to the overall level of inequality in the host society, with all that this entails, and to make use of social stratification theory to explain them (Platt 2011).

In sum, the identification of compositional differences between groups is useful to provide an overall idea of average differences between groups in key correlates and indicators of inequality, especially if groups are homogeneous. Without the exploitation of the main sources of variation within groups, such as social background and gendered patterns of experience, we are not able though to provide a convincing explanation of how the experiences of the sub-populations within ethnic-origin groups can be explained in the context of a broader social system with particular mobility and reproduction patterns in place. By default, we should thus refrain from comparing groups monolithically. Thus, the main idea is that we should ultimately aim at constructing and comparing comparable groups.

### 1.2 The case of the United Kingdom

There are at least four main reasons why the United Kingdom is an appropriate case for this thesis. First, its position among the top immigration countries in Europe, and its condition as an old migration country[2] with a well-established second generation and a consolidating third

[2] By old immigration countries I refer to those that started experiencing main migration inflows after the Second World War. The UK is one of the countries with the highest absolute number of immigrants in Europe (OECD/European Union 2015).

one. Second, the high quality of its data in general, but particularly on immigrants and their offspring. Third, the political and sociological emphasis on using primarily self-reported ethnic categories instead of other variables such as, say, country of origin or nationality—an Anglo-Saxon practice that is not commonly used in other European countries. Last, the existence of significant between- and within ethnic-group variation. Thus, the United Kingdom presents a differentiated immigrant–native compositional structure with respect to other countries in mainland Europe, where immigrants are mostly over-represented at the bottom of the socio-economic structure. In the United Kingdom immigrants are instead over-represented both in very high-skilled and very low-skilled occupations, similar to the case of the US, with historically-polarized shortages in the labour market (Ballarino and Panichella 2013; Heath, Rothon, and Kilpi 2008; Reyneri and Fullin 2011).

The main hindrance for the quantitative study of immigrant performance in European labour markets is the difficulty to obtain sufficiently large datasets allowing for inter/intra-group comparisons. The United Kingdom has a long tradition in producing good quality longitudinal data, and the *UK Household Longitudinal Study (UKHLS)*, most commonly known as *Understanding Society*, is a paradigmatic example of this tradition. The study combines the richness of longitudinal approaches with innovative (over) sampling strategies to ensure both the quality of information and the quantity of cases of immigrant persons and their corresponding family or household contexts. Although *Understanding Society* is a generalist study, it provides detailed indicators of educational and labour market performance. It also allows for flexibility and a high level of accuracy in constructing the main competing explanatory variables used in this thesis namely migration status, ethnic origin and identity, and social origin.

*The UK as a migration country*

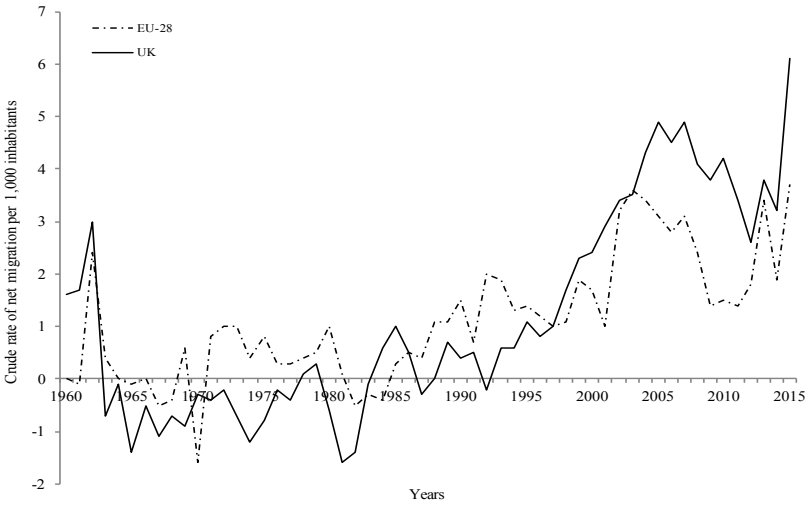
*Understanding Society* addresses the necessity to account for the increasing diversity in a country with some of the most ethnically-diverse cities in Europe and the world. Some examples are the Greater Manchester area, where it is estimated that up to 200 languages are spoken by long-term residents in a population of 500,000 inhabitants (Gopal et al. 2013), and London which hosts about three million foreign-born persons (almost 40% of its population) according to the 2011 census. Ethnic minorities currently account for 80% of population growth in the country, with one in four children under age 10 having foreign ancestry. Estimates predict that in 2050 approximately one out of three persons in the UK will have an ethnic minority

background. This implies that by then, the five largest minority groups —i.e. Indians, Pakistanis, Bangladeshis, Black Africans and Black Caribbean— could potentially double their size from 8 to 16 million, with Black Africans and Bangladeshis the fastest-growing groups, and Indian and Black Caribbean the slowest (Sunak and Rajeswaran 2014).

The United Kingdom has been and remains a country of labour migration, representing an attractive pole for migration inflows coming from or to Europe (OECD/European Union 2015). As *graph 1.1* shows, positive net migration rates per 1,000 inhabitants have been a constant since the '90s with values above EU-28 average rates. The country's net migration rate reached its first historical peak in 2005, followed by a higher one in 2015. As shown in the graph, we can also observe important peaks in the past such as the ones experienced in the '60s and mid-'80s. Although the crude rate of net migration has increased steeply since the '90s —from 0.7 in 1989 to 6.1 in 2015—we can observe a significant decline during the economic recession, reducing almost by half —from 4.9 in 2007 to 2.6 in 2012.

Migration has become the main driver of demographic change in the UK, as in many other advanced economies. Between 1991 and 2012 for instance, more than half (54%) of the increase of the population in the United Kingdom can be attributed to net migration (Cangiano 2014). In the year ending March 2016, 633,000 people (282,000 of them non-EU citizens and 268,000 EU-citizens) migrated to the UK, while 306,000 emigrated, resulting in positive net migration of 327,000. Reasons for migrating are important, as they usually correlate with the outcomes obtained in host societies (Wimmer 2009). Reasons vary over time, and are influenced by the cyclical nature of global social and political processes. In the first quarter of 2016, the main reason for long-term immigration to the UK was work (48%), followed by formal study (26%) and 'accompanying or joining' (13%) (ONS 2016).

*Graph 1.1. Crude rate of net migration plus adjustment per 1,000 inhabitants, UK 1960–2015*




Notes: The indicator is defined as the ratio of net migration plus adjustment during the year to the average population in that year, expressed per 1,000 inhabitants. The net migration plus adjustment is the difference between the total change and the natural change of the population.
Source: *Eurostat,* 2016, author's analysis.

*The changing composition of the immigrant population*

International migration is not a random process. Historical, cultural and economic ties between destination and origin countries increase the chance of migration between them (Levels et al. 2008). Colonial links and networks stand as one of the key explanatory factors of the composition of migration inflows, as well as of the mechanisms of different migration systems (Czaika and de Haas 2013). As in other European countries (e.g. France or the Netherlands), the largest migrant groups in the UK come from former colonies. After the Second World War, international migration changed quantitatively (increasing in number) and qualitatively (changing its characteristics) fostering ethnic diversity with the arrival of 'visible minorities' (Castles and Miller 1993; Cheung and Heath 2007). In general terms, migration into the UK has been characterized by Eastern European workers, highly skilled/educated specialists, family reunion immigrants from ex-colonies, and asylum seekers (OECD/European Union 2015; Reyneri and Fullin 2011).

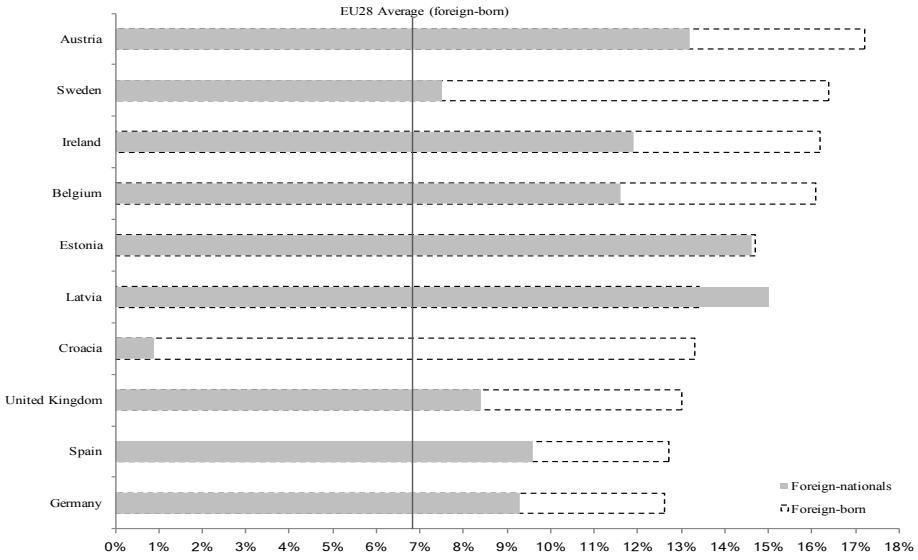
As a result of the continued migration inflows, the United Kingdom is one of the top immigration countries in Europe (see *graph 1.2*). The immigrant (i.e. foreign born) stock on 1 January 2015 represented 13% of the total population, while 8% were foreign nationals. UK

doubles therefore the EU-28 averages of 7% foreign born and 4% foreign nationals. In absolute terms, the country currently hosts around 8.4 million foreign-born people, compared to 1.9 million in 1951. Among the foreign born, 81% (i.e. 6.6 million) are part of the working-age population (i.e. aged 16-64), and represent 16.7% of the total work force (OECD/European Union 2015:30; Rienzo 2015).

It is well known that the UK differs from other continental European countries in terms of the socio-economic composition of its immigration fluxes and stocks. According to Eurostat (2015), the United Kingdom is the country of the EU-28 with the highest share (48%) of foreign-born population aged 20 to 64 with a tertiary education degree. The figure for the UK represents for instance four times that of Italy (11%) and Greece (13%), being also significantly higher than the EU-28 (26%) and the OECD (31%) average shares.

The unemployment rate of the foreign born has traditionally been higher than that of the UK born. For both groups unemployment rates have decreased since the 1990s, those of foreign-born men having experienced a higher reduction. For men, in the last years, there has actually been a pattern of convergence in foreign- and UK-born unemployment rates at the aggregate level, although significant variation remains across ethnic-origin groups and immigrant generations, with some 'visible minority' groups doubling the rates of unemployment among natives (Cheung and Heath 2007:522). For women, differences have remained instead more or less stable over time, unemployment rates being constantly higher for the foreign born (Rienzo 2016). Moreover, immigrants (and their descendants), particularly males, also tend to have lower wages after controlling for regional distribution and education. There are however significant differences between immigrant/ethnic groups, as well as by gender, in different labour market indicators (Dustmann, Frattini, and Theodoropoulos 2011).

*Graph 1.2 Foreign born and foreign nationals as a percentage of the total population, top ten EU-28 countries on 1 January 2015*




Notes: Countries ranked by foreign-born share. Luxembourg and Cyprus not considered. The high number of foreign nationals in Latvia and Estonia reflects the extended status of 'recognized non-citizen' in those countries.
Source: *Eurostat,* 2016, author's analysis.

The largest immigration groups (by country of origin) settled in the United Kingdom have changed significantly in the last 60 years if we refer to data from the 1951, 1991 and 2011 censuses (see *graph 1.3*). The first to arrive to the country were Polish and Irish immigrants, as southern Ireland became independent from the United Kingdom in 1921. While the former came basically under guest workers' programmes and left the country afterwards, the latter settled, and in 1951 already represented the top immigrant group. Polish and Irish, together with refugee European Jews, and nationals returning from different parts of the British Empire, composed the first important migration inflows to the country.

After the Second World War, as already pointed out, the composition of flows changed significantly with the arrival of Caribbean and South Asian immigrants. Between 1951 and 1971, there was a boom in Jamaican-born immigration, driven by economic push and pull factors, reaching 172,000 persons in 1971. They were recruited directly to fill labour-market vacancies in two different sectors in particular: the National Health Service (NHS) and the public sector —especially London Transport. In general, Caribbean immigrants took low-skilled job positions, with the exception of nurses (mainly women) working for the NHS. Due to this gender segregation in the labour market, Caribbean women have on average a higher

level of education than men. Today, the so-called black Caribbean group, formed mainly by Jamaicans, represents the highest share of British-born descendants (ONS 2013).

After the Caribbean, migration from India and Pakistan, and posteriorly Bangladesh,[3] consolidated some years later, roughly between 1965 and 1974. Migrants from these groups could be characterized mostly as labour immigrants occupying unskilled jobs, although some of them were also highly skilled, such as Indian doctors —who, like Jamaican nurses, came to fill vacancies at the NHS—and African Indians entering the country as refugees after the independence of sub-Saharan British colonies, where they occupied positions in government services and business. Immigrants from Bangladesh, and to a lesser extent Pakistan, came instead predominantly from rural areas, and had little knowledge of English and were low educated and skilled. The main sending countries in 2011 are precisely these three New Commonwealth countries.[4] The number of people coming from Pakistan continues to grow, and has doubled since 2001, representing 6% of the total foreign-born population in 2011. For the same period, the figure for Indians is 1.7 times higher, and they account for 9% of the total foreign-born population. Pakistanis and Indians are historically-settled groups in the UK, as approximately half of Indian and Pakistani-born residents in England in 1971 were still residents in 2011 (ONS 2013).

One of the latest groups to arrive and settle in the UK was Africans. Sub-Saharan British colonies, compared to others, experienced a belated process of independence during the '60s. The main driver of migration in the African case was asylum, but it was also influenced by the availability of positions (nurses and doctors) in the British health care system. Moreover, most Africans came from relatively comfortable backgrounds with the intention of acquiring British education to remain in the country. As with second-generation Indians, this would explain the higher than average educational level of this origin group, particularly the first generation, which is one of the highest educated in Britain. On the contrary, as I have already mentioned, Pakistani, Bangladeshi, and Jamaicans (men in particular), fit on average more in a low-skilled profile. Another recent immigrant group are Chinese, which like the Indians, present different educational and skill levels, as some came from different countries of the British Empire and Hong Kong, and others were already established in the UK working in low-skilled occupations in the catering and laundry sectors (Cheung and Heath 2007).

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[3] Bangladesh obtained its independence from Pakistan in 1971.

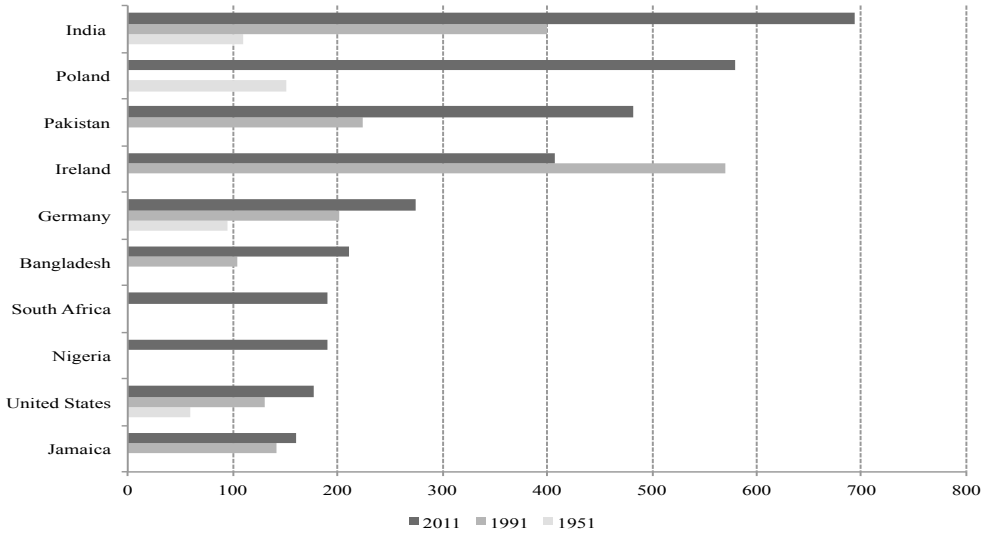
[4] New Commonwealth countries are those that became independent from the British Empire after the Second World War and Old Commonwealth countries are the ones that gained independence at the end of the nineteenth century.

In the last decade, with the changing configuration of European borders due to successive enlargement processes (since 2004), there has been an increase in the number of immigrants from new origin countries such as Poland and Lithuania (ONS 2013). In the United Kingdom these immigrants tend to be classified as 'White Other' in official ethnic-based statistics, confusing ethnicity with race (Cheung and Heath 2007). In the 2011 Census, this category was the largest one after 'White British'. Poland[5] for instance reached the second position in 2011 in the list of top-sending countries to the United Kingdom with a ten-fold increase compared to 2001, from 58,000 to 579,000 immigrants (ONS 2013). In 2012, Poles already represented 8.7% of the total foreign-born population, and 15% of all foreign citizens (Czaika and de Haas 2013). Due to their more recent arrival, they mostly belong to the first generation.

In sum, immigrant flows to the UK have been composed mostly of immigrants from New and Old Commonwealth countries, with significant compositional differences in terms of skills and education between, but also within, ethnic-origin groups. The figures so far explain a partial story of the relevance of the migratory phenomenon in the United Kingdom, as they do not specifically provide information on the stock of second and third generation immigrants — native-born children and grandchildren of immigrant parents— in the country, which have increasingly reached the labour market in the last decades. Its magnitude can be however inferred from the time of arrival of the different groups and their continued participation in the Censuses. The second generation accounts for over one third of the total immigrant population, with an increasing number of persons from mixed ancestry. According to Dustmann et al. (2011), from 1979 to 2009 the percentage of British-born ethnic minority individuals (self-defined) with respect to the working age population increased tenfold —from 0.3% to 3%.

[5] Although Poland was already a sender country in 1951 (see *graph 1.5* above), it is not until 2011 when we start to see its consolidation, as the first movers did not remain in the UK (ONS 2013).

*Graph 1.3 Evolution of the top ten largest immigrant groups, England and Wales 1951–2011 (in thousands)*




Source: *Censuses for England and Wales (Office for National Statistics)*, 1951, 1991 and 2011, author's analysis.

The dispersion of ethnic-minority groups throughout British territory has been highly determined by labour demand. Immigrants are mostly concentrated in metropolitan areas in the centre and north of the country. More than two thirds of immigrants live in densely-populated areas (OECD/European Union 2015). London is the main pole of attraction, hosting about 50% of all immigrants and their descendants, followed by other cities in the East and West Midlands (e.g. Birmingham and Leeds), as well as in North West (Great Manchester) and Yorkshire and the Humber (Bradford and Leeds). The last ethnic-origin groups to arrive —i.e. Africans and Bangladeshis— are more likely to reside in metropolitan areas, while Indian, Pakistani, and Chinese are more highly dispersed.

The spatial distribution of ethnic minorities correlates with the spatial distribution of deprivation, and therefore influences their integration outcomes. This has its roots in the initial settlement process marked by spatial segregation based on ethnicity, and reinforced by the suburbanization process of natives. Persons from Bangladeshi and Pakistani origins are more likely to live in the 10% most deprived areas —measured with the Index of Multiple Deprivation—followed by Africans and Caribbean. Indians and Chinese are instead significantly less likely to live in the 10% most deprived areas, resembling more the levels of the natives (Zuccotti 2015:16–21).

For some groups, e.g. Pakistani and Bangladeshi women, a greater co-ethnic spatial concentration (net of confounders) might result in negative outcomes, such as lower labour

force participation and social class attainment; while for other groups, e.g. Indian men, it might have a positive effect on class attainment. For Bangladeshi and Pakistani women co-ethnic concentration might foster the maintenance of more traditional norms, affecting these negatively their labour market outcomes. For Indian men in the UK, co-ethnic concentration might instead result in the pooling of group resources (i.e. ethnic capital) and community spill-over effects, ultimately having a positive effect on class attainment (Li and Zhou 2017; Zuccotti and Platt 2016).

*Policy responses to migration inflows and stocks*

The political discussion over the design and implementation of immigration policies, and the configuration of national migration systems more generally, is one of the most vibrant debates of national and supranational governments in Europe. Even though the effectiveness of integration policies is questioned, and evidence on the relationship between these policies and outcomes —on top of for example socio-economic characteristics of immigrants and the internal functioning of the educational system and labour market in destination countries— is scarce (Cebolla-Boado and Finotelli 2015; Kogan 2016), policies of control and integration can at least have an immediate impact on the size and composition of inflows (Czaika and de Haas 2013).

The United Kingdom has since the 1970s followed a multicultural/communitarian approach[6] as a policy tool for integration, which has been formalized in different Equality Acts. These have proposed over time differentiated policies within the European context in the treatment of race and religious diversity. Recent political discourse and policy developments seem however to be challenging UK's multiculturalism, and some have even predicted its death (Heath and Demireva 2014; Modood 2013). The integration model of the UK differs from that of mainland Europe, where there has been a more or less general preference for assimilation, France for instance being a historically assimilationist country. On the other hand, new immigration countries in southern Europe appear still to lack a definite model of integration (Cebolla-Boado and Finotelli 2015; Cebolla-Boado and González Ferrer 2013).

Historically, the restriction of immigration from New Commonwealth countries has been one of the main priorities for politicians in the United Kingdom since the initial and very liberal immigrant legislation of the British Nationality Act in 1948, which gave the right of migration

[6] As a prescriptive term, multiculturalism intends to promote diversity and support its institutionalisation.

to all subjects of the Crown (i.e. *circa* 800 million people), mainly due to existing labour shortages in a context of post-war economic development. With the significant increase in the number of immigrants favoured with the initial liberal legislation, reforms such as the Commonwealth Immigrants Acts of 1962 and 1968, the Immigration Act in 1971, and the British Nationality Act in 1981 are examples of the increasing level of restrictive conditions applied to those aiming to enter the country from outside Europe. The 1970s represented in the UK —and in many other European countries— a turning point in migration policy, as the country closed its borders to further labour immigration, although family reunification did not cease. Despite the 1970s closure, low unemployment levels, high demand for workers, and increasingly favourable equal opportunities legislation continued to attract new immigrants, who had new legal channels in place to enter the country. At the end of the 1980s refugee inflows gained importance, and in the 1990s irregular immigrants became a prominent feature (Cheung and Heath 2007; Düvel 2007; Spencer 1997)[7].

Restrictive conditions are currently in vogue again in the UK, with the overall goal of reducing total net migration (OECD 2013). In 2010, the government implemented its most recent large reform, with the aim of reducing the number of grants of settlement by means of restricting some of the conditions for entry. The primary target of the new set of policies was family reunion, one of the main drivers of recent migration to Europe. Migration is most of the time a family endeavour (Platt 2006). Family-driven migration, usually long lasting, has accounted for most of the migration to Europe since the first important migratory waves after the Second World War. In 2012 for instance, in the United Kingdom almost half of the settlements were granted on the basis of employment and residency (including dependants of labour migrants), and around 40% were granted on the basis of family formation and reunification (Blinder 2014). In parallel to these new policies, in 2008 the country also implemented a *Point-Based System (PBS)* to regulate inflows and increase the skill level of labour migration from non-EEA countries. The government not only changed the regulation for entry, but also increased the pressure on those who do remain by means of the idea of 'earned citizenship'[8] in order to break the link between workers and settlers (Huddleston et al. 2011).

[7] See *table 1.1* for a summary of the major migration policy reforms in the UK.

[8] This concept relates to the idea that British citizenship is a privilege to be earned in order to stay on a permanent basis in the country; in the meantime, immigrants have the status of 'probationary citizens'.

*Table 1.1 Major migration policy changes in the UK, 1949–2013*

| *Year* | *Policy* | *Description* |
|---|---|---|
| 2016 | *Immigration Act* | Introduction of new sanctions for illegal workers and rogue employers, prevention of access to services of illegal immigrants, introduction of new measures to enforce immigration laws and removal of illegal immigrants |
| 2014 | *Immigration Act* | Facilitation of the removal of illegal immigrants, end the abuse of article 8 on respect for family and private life, prevention of illegal immigrants' abuse of public services/labour market |
| 2013 | *'Life in the UK' test extended to all immigrants* | Extension of the 'Life in the UK' test to all applicants for settlement, and requirement of a B1-level English certificate |
| 2010 | *Equality Act* | Illegalization of racial discrimination by public authorities, Home Office included, immigration authorities, and the entrance clearing service. Promotion through public bodies responsible for immigration of the elimination of unfair treatment |
| 2009 | *Borders, Citizenship and Immigration Act* | Requirement of institutional sponsorship for foreign students |
| 2008-10 | *Points-Based System (PBS)* | 'Tiers' replace previous work permits: Tier 1 Entrepreneurs, investors, talented; Tier 2 Skilled workers with a job offer from a UK-based employer; Tier 3 Unskilled immigrants (not implemented); Tier 4 Students; Tier 5 Temporary workers and youth mobility |
| 2008 | *Compulsory ID card for foreign nationals* | Introduction of a new identity card for foreign nationals (ICFN) to combat illegal employment and reduce illegal migration |
| 2007 | *Creation of the Migration Advisory Committee* | Creation of a committee of experts, mostly economists, to develop measures to attract people with the 'right' skills for the UK according to labour market needs |
| 2007 | *Extension of the 'Life in the UK' test* | Extension of the 'Life in the UK' test to all applicants for permanent residence |
| 2006 | *Immigration, Asylum and Nationality Act* | Creation of the points-based system.<br>Increase of the control to travellers to the UK and restriction of the right to appeal for refusal of entry clearance for students |
| 2006 | *Equality Act* | Prohibition of discrimination based on religion and creation of the Equality and Human Rights Commission replacing the Commission of Racial Equality |
| 2005 | *'Life in the UK' test* | Naturalization becomes subject to passing a test on life in Great Britain and proving English language ability |
| 2002 | *Nationality, Immigration, and Asylum Act* | Introduction of the first English and citizenship tests for immigrants, as well as measures for bogus marriages |
| 2000 | *Race Relations (Amendment) Act* | Prohibition of discrimination by public authorities, e.g. police, and requirement to public authorities to work towards the elimination of discrimination |
| 1996 | *Asylum and Immigration Act* | Extension of rights for searching and arresting immigrant offenders |
| 1988 | *Immigration Act* | Consideration of overstaying as a continuing offense |
| 1981 | *British Nationality Act* | Removal of the automatic right of citizenship for those born on British soil |

| | | |
|---|---|---|
| 1976 | *Race Relations Act* | Extension of the understanding of discrimination to include indirect discrimination, and creation of the Commission for Racial Equality as a monitoring authority to promote equality of opportunity and eliminate discrimination |
| 1973 | *UK joins European Union* | Free movement of workers within the EU and right to family reunification |
| 1971 | *Immigration Act* | Abolishment of the automatic right to remain in the UK for Commonwealth citizens. Introduction of 'patriality', which limits free entry to individuals with at least one parent/grandparent born in the UK |
| 1968 | *Commonwealth Immigration Act 1968* | Extension of the control of those without a parent/grandparent born in/citizen of the UK. The main aim is to control the migration of Asians from Eastern Africa, as countries such as Kenya and Uganda gain independence. |
| 1968 | *Race Relations Act* | Prohibition of racial discrimination in housing, employment, and public services |
| 1965 | *Restriction of family reunification* | Extension of immigration controls to family members |
| 1965 | *Race Relations Act* | Prohibition of racial discrimination in public places |
| 1962 | *Commonwealth Immigration Act* | Prevention of entry to those with passports from a colonial country, and establishment of voucher system for intending immigrants |
| 1948 | *British Nationality Act* | Creation of UK citizenship, differentiating it from the common status of 'British subject' colonial territories |

Source: Adapted by the author from Demig (2015) and www.gov.uk/collections.

To systematically compare the UK to other countries in terms of differences in integration policies I use the *Migrant Policy Index (MIPEX)*. This index offers the possibility of comparing migration policies over time (since 2007) across different European contexts in seven policy areas: education, labour-market mobility, family reunion, anti-discrimination, access to nationality, long-term residence, and political participation.[9]

In comparative terms, in 2014 the UK ranked 15 —out of 38 countries[10]— with an overall MIPEX score of 57,[11] 6 points lower than in 2010. The highest score in the ranking was for Sweden (78) and the lowest for Turkey (38) —i.e. these are the countries with the most- and the least-welcoming integration policies. Although presenting an average MIPEX score in 2014, the United Kingdom is the country, after the Netherlands, that has experienced the

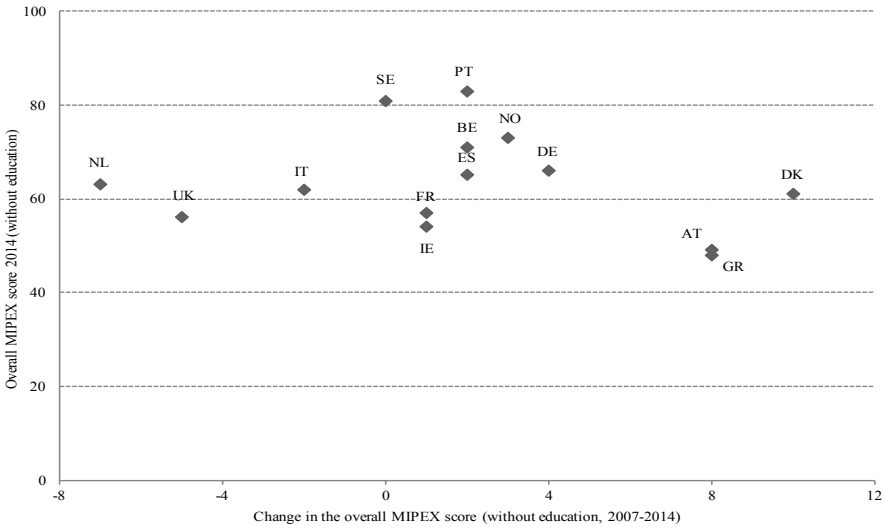
[9] Data are accessible at: http://www.mipex.eu/play/. For the 2015 release health was added, although I do not report results for this indicator as it is missing for previous time periods.

[10] Total number of countries included in MIPEX.

[11] The overall MIPEX score ranges from 0 to 100, and it is the average value of more than 100 different migration policy indicators grouped in eight policy areas (labour-market mobility, family reunion, education, political participation, long-term residence, access to nationality, anti-discrimination, and health), and benchmarked to European migration policy standards.

steepest decline in the score over time with a negative 5-point difference between the policy scores of 2007 and 2014 (see *graph 1.4*).

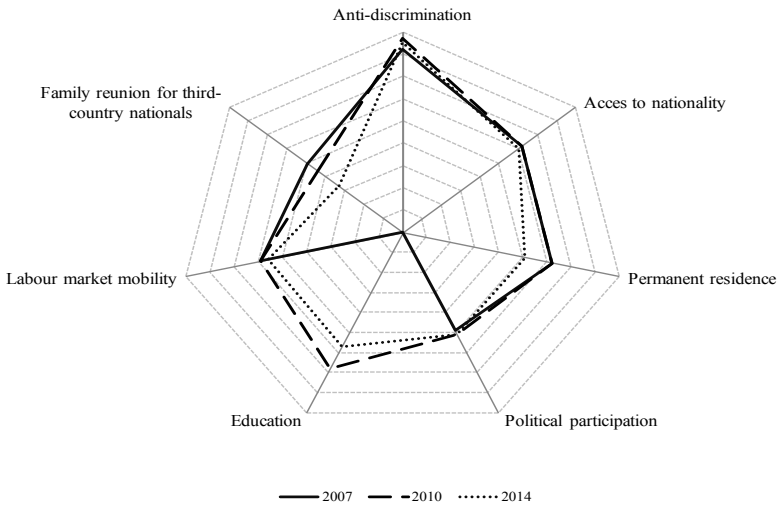
*Graph 1.4 Change in the overall MIPEX score (without education), EU15 2007–2014*




Notes: I exclude Luxembourg.
Source:*MIPEX*, 2016, author's analysis.

Focusing on the different policy areas within the UK, *graph 1.5* shows a high score on anti-discrimination policies, which is stable over time. In access to nationality, labour-market mobility, and political participation in the country presents average scores, also quite stable over time. What proves more informative is to look at the items that have reversed significantly in the period studied (2007–2014) due to recent and abrupt changes in the legislation. These are family reunion for third-country nationals (-16 points), permanent residence (-11 points), and education (-9 points). These negative changes in the MIPEX score should be seen as a result of the policy changes described above.

*Graph 1.5 UK MIPEX score change in different migration policy areas, 2007–2014*




Notes: No data available on education for 2007.
Source: *MIPEX*, 2016, author's analysis.

*Mobility research in the UK and Europe*

The debate on social mobility in the UK is not conclusive (Heath and Li 2015; Li 2016). Some authors have found constant fluidity, showing that despite the increase in absolute mobility, relative mobility chances have remained more or less stable over time (Bukodi et al. 2015; Erikson and Goldthorpe 1992, 2010; Goldthorpe 1987; Goldthorpe and Jackson 2007; Goldthorpe and Mills 2004, 2008). On the contrary, others observe declining mobility across cohorts, although they focus on income instead of class (Blanden et al. 2004; Blanden, Gregg, and Macmillan 2013a). On the other hand, other authors find evidence in between, reporting increasing fluidity although with significant class differentials (Devine and Li 2013; Heath and Payne 2000; Lambert, Prandy, and Bottero 2007; Li and Devine 2011, 2014). As introduced above, within this debate there is increasing interest to know where ethnic mobility stands, although there is still a lack of mobility research on ethnic minorities, especially for the second generation. There are however significant exceptions, such as the contributions of Platt (2005), Heath and McMahon (2005), Li and Heath (2014, 2016), and Zuccotti (2014). Additionally, studies conducted in the United States have been also concerned on the class and income stratification of blacks and whites (Bloome and Western 2011; Duncan 1968; Featherman and Hauser 1976; Hout 1984a; Wilson 1980, 2011; Yamaguchi 2009).

Regarding the mediating role of education in intergenerational class mobility, advanced economies (the UK included) have experienced a process of educational expansion which has reduced inequality of educational opportunity. In this context of expansion, the link between education and destination has strengthened over time at the expense of that between origin and destination (Breen 2004; Breen et al. 2009; Breen and Jonsson 2007). Class differences have however persisted. In this line, challenging the liberal view of the increasing importance of education in mediating mobility, some authors have argued that the mediating role of education between origin and destination has actually tended to decline (Goldthorpe 2016). The supporters of this view point as possible explanations to the decreasing value of educational qualifications for employers in making personnel decisions, and the importance of non-cognitive characteristics and personality traits —as well as the role of family in fostering them during childhood (Jackson 2006; Jackson, Goldthorpe, and Mills 2005). Thus, in parallel to an increase in social mobility in absolute terms, educational expansion has weakened overtime the relative occupational advantage afforded by education. The idea of education as a great equalizer is therefore questioned by several authors (Bernardi and Ballarino 2016).

*Migration and labour market research in the UK*

Different forms of disadvantage experienced by ethnic minorities in the labour market have been a topic of interest in the country at least since the first National Survey of Ethnic Minorities in the late '60s. Migration research has mainly focused on ethnic penalties, a concept that was actually coined in the British labour-market context in the early '80s by Heath and Ridge (1983) in their study *Social mobility of ethnic minorities* on unemployment differences between white and black African men. Since the original formulation of Heath and Ridge, the concept has been highly influential and applied extensively in different disciplines such as sociology and behavioural economics.

Based on the existing research, we could draw two main overall conclusions. The first is that on average no ethnic group performs significantly better than the majority of the population in the labour market, especially in (un)employment. The second conclusion states that the former is true despite the fact that second-generation immigrants have increased significantly their mean educational attainment. This has led to this group overcoming, on average and with ethnic-origin variation, the educational attainment of natives. Second-generation immigrants still face significant barriers to employment and social mobility despite their remarkable achievements in education, with a significant increase in access to universities.

These two conclusions would imply therefore that ethnic minorities in the UK are acting meritocratically in a non-meritocratic society (Platt 2005).

Migration research on the UK often reports significant differences between the experiences of different ethnic-origin groups and natives at different labour-market stages, where 'different processes of inclusion and exclusion operate' (Heath and McMahon 1999:27). *Table 1.2* summarizes the findings obtained on employment and occupational attainment by some of the main studies on these topics. The tables show that men with African (mostly first-generation) and Caribbean ancestries present on average a high probability of being unemployed, while Indian and Chinese are rather more successful in avoiding unemployment. Among women, Bangladeshi and Pakistani experience the highest levels of unemployment and part-time employment —with the latter being also true for Bangladeshi men. Men from these two South Asian origins, have the highest rates of self-employment. With regards to occupational attainment and earnings, the experience of Africans is poor, even if they have above-average levels of education, which are similar than those of Indians (Berthoud 2000; Carmichael and Woods 2000). In terms of getting access to managerial and professional occupations, findings suggest that Indian men and Caribbean women are, together with Irish, the two subgroups that, all else being equal, have occupational attainment premiums with respect to natives (Heath et al. 2008; Platt 2006).

Ethnic penalties/premiums in labour-force participation have not been as systematically studied in the UK, resulting in less conclusive findings (not summarized in *table 1.2* below). Overall, studies on ethnic differences in labour-force participation conclude that participation is a gendered experience —i.e. inactivity affects mostly women, albeit not only— across all groups, and that it tends to increase in the second generation for the groups with higher penalties, although significant differences remain between groups.

There is high variation among immigrant women. Ethnic penalties with respect to natives are observed for Pakistani and Bangladeshi, and Indian to a lesser extent, while for Irish, African, and Jamaican premiums instead prevail (Dale 2002; Dale et al. 2008; Dale, Lindley, and Dex 2006). Moreover, other authors have more recently argued that there is actually a Muslim penalty in female labour-force participation rather than an ethnic one (Cheung 2014; Heath and Martin 2013).

*Table 1.2 Summary of ethnic penalties/premiums in the first and second generation by ethnic origin*

| | Employment | | Occupational attainment | |
|---|---|---|---|---|
| | Men | Women | Men | Women |
| 1st generation (ref. natives): | | | | |
| Irish | – | n.d. | + | + |
| Indian | – | n.d. | – | – |
| Pakistani | – | – | – | – |
| Bangladeshi | – | – | – | – |
| African | – | – | – | – |
| Caribbean | – | – | – | n.d. |
| 2nd generation (ref. natives): | | | | |
| Irish | – | + | + | + |
| Indian | – | – | + | n.d. |
| Pakistani | – | – | – | – |
| Bangladeshi | – | – | – | – |
| African | – | – | – | – |
| Caribbean | – | – | – | + |

Notes: 1. A negative sign indicates the existence of an ethnic penalty, and a positive one the existence of an ethnic premium at the same levels of education, age, and marital status. N.d. Indicates no substantive difference with respect to natives. Emboldened signs indicate statistically significant differences at the 0.05 level.
2. Occupational attainment is usually measured as access to the service class.
Source: Adapted by the author from Berthoud (2000), Cheung and Heath (2007), Heath et al. (2008), Platt (2005, 2006), and Zuccotti (2014, 2015).

Some researchers also conclude, challenging average-based accounts, that there is within-group polarization in some labour-market outcomes in the UK. Thus, paradoxically, immigrants with the same ethnic origin compete on equal terms with natives at higher positions, but at the same time experience relative disadvantage at lower positions. For example, what Heath and McMahon (1999:27) find in their study is that among Chinese, the qualified are the most successful group in accessing the salariat, while the unqualified are the least successful in terms of avoiding low positions. This is also true for Indians or Irish for example. This within-group polarization should make us reflect on the validity of ethnicity as a grouping variable, as already pointed out.

As I have discussed, the often-reached conclusion is that for some ethnic groups disadvantages in employment remain once we account for other factors that explain economic opportunities —i.e. education, age, marital status. These remaining disadvantages are the so-called ethnic penalties. Moreover, there seems to be no evidence that these penalties vanish over generations, particularly in unemployment, although they do diminish in magnitude. On the contrary, for some groups such as the Caribbean, ethnic penalties in the labour market

increase on average in the second generation (Berthoud 2000), challenging the essence of assimilationist postulates. These processes, as Platt (2005) argues, should be mostly understood as differences in particular migration histories and labour market experiences of the first generation, rather than cultural or ethnic specific characteristics. Thus, a better understanding of how social background mechanisms work can offer new explanatory frameworks for a better interpretation of these findings.

### 1.3 Research strategy

My research strategy aims at testing whether non-ethnic explanations for immigrants' labour market disadvantage hold, especially for the second generation. Different competing hypotheses related mostly to the effects of ethnicity, migration status, social background, and gender[12], on labour-market outcomes are confronted. Two overall approaches emerge from what it has been discussed so far:

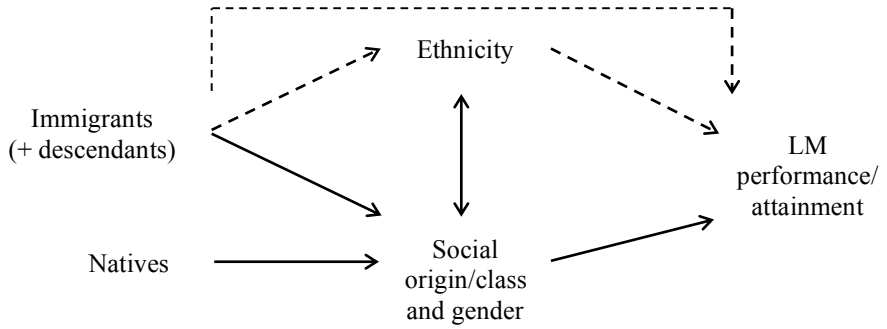
First, we could argue that if we observe a differential in the performance and attainment of immigrants and natives in the labour market, this is most likely going to be related to the unbalanced stratification of these two populations in the social structure. The effect of ethnicity is supposed to be negligible in this hypothesis, as it is argued that it can be mostly explained by social origin mediating mechanisms, relegating ethnic-based explanations to a negligible position. What is also interesting of this approach is to see whether social origin and class-related mechanisms operate in a similar way for immigrants as for the majority of the population. Instead, a second approach would alternatively argue that ethnicity and/or ethnicity-related variables explain the observed ethnic differential in the labour market. Therefore, even if class or social origin differences are accounted for, people might still perform differently or achieve different positions in the labour market because of their ethnic markers.

These two theoretical approaches are summarized in *graph 1.6*. The graph shows, on the left, two origin situations: either native or immigrant —including immigrant descendants. Moving from the left to the right, we find two stratification or mediating constructs: class and ethnicity. The latter only applies to immigrants and the path is displayed in dashed lines. On the right-hand side of the graph, we find the outcome of interest. I also draw an extra bidirectional arrow between ethnicity and class, and a direct one from migration status to

[12] Migration is a gendered process, and it constitutes a good practice to run separate analyses on labour market outcomes by gender.

labour-market outcomes. The former allows for the hypothesis that they might play an interactive (or multiplicative) role in explaining particular labour market indicators; while the latter allows for a direct immigrant effect, particularly for the first generation, but which might also have long-term consequences and affect the second as I will discuss later.

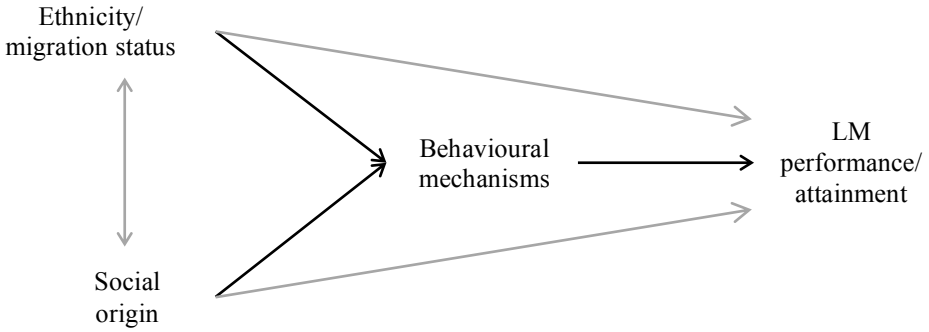
*Graph 1.6 The occupational stratification of immigrants and natives*




Notes: Non-dashed lines represent the social origin approach, and dashed lines refer to the ethnic origin one.
Source: Adapted by the author from Cebolla-Boado (2007:16).

The two hypotheses refer ultimately to the explanatory power of ascriptive characteristics. Ethnic origin/identity, migration status, and social origin influence personal decisions, and therefore it is necessary to complement these competing explanations with mediating fundamental 'pushing' and 'pulling' behavioural mechanisms like motivation for example (Gambetta 1987). This behavioural mediation involves strategic choices, and the conscious or unconscious use of non-cognitive skills or abilities. As Ermisch et al. (2012) point out, non-cognitive abilities gain importance in the labour market, compared than throughout schooling for example. Moreover, individuals might also behave in a way that maximises their occupationally relevant skills. Behavioural aspects are important when looking at ethnic penalties, as we could hypothesise for instance that an "expected" behaviour (according to the employer), all else equal, might attenuate discrimination in the labour market for example. In *graph 1.7* I schematise this idea.

*Graph 1.7 The complementary behavioural/choice-based explanation*




Notes: Lines in black refer to the 'behavioural path', and grey lines to origin factors.

Following a non-ethnic approach, the main aim should be to shed light on the specific mechanisms of action operating behind in order to reconcile race/ethnicity and causation. We should identify and differentiate the constitutive elements of ethnicity that we observe to vary within a particular group of interest, which at the same time are expected to generate change in our outcome(s) of concern. Thus, if we are able to identify meaningful within-group differences, we are in a better position to uncover and isolate specific causal mechanisms at work. The identification of these causal mechanisms within the framework of within-group designs is a response to a *how* causal question, i.e. how differences in labour-market outcomes for different groups can be explained, which is determinant for producing new theory as well as making predictions (Holland 2008; Sen and Wasow 2016).

### 1.4 Structure of the thesis and content of the chapters

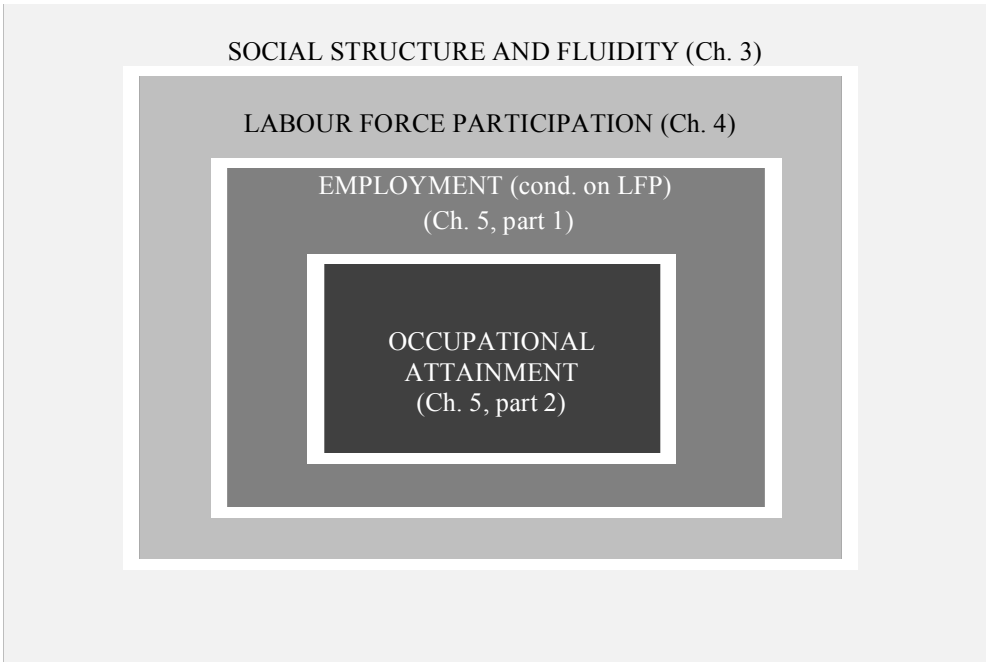
This thesis is structured around three main empirical chapters. These are preceded by the present introduction and a chapter on the bases for the empirical analyses; and followed by a conclusion in which I discuss the most relevant findings and their contribution to the existing body of research on the topic. Chapters *three*, *four*, and *five* comprise the empirical core. Although each can function autonomously, the combination of the three covers the experience of immigrant and native men and women in the labour market. Each chapter builds on the previous one in the sense that it looks at a different barrier or necessary precondition to occupational attainment —depicted by the central darker grey square in *graph 1.8*. The findings of the thesis confirm some of the existing findings on the interplay between social and ethnic

origin penalties in the UK, but also makes specific contributions to previous studies on this topic.

Different factors are at work at different labour market stages. The first selection process is labour force participation. This is clearly related to gender, and indicates economic exclusion. It is likely to be associated with men and women's attitudes on the role of women in society, and in the household in particular, and influenced by women's labour market behaviour in the previous generation. The second barrier for labour market attainment, once there is a willingness to work, is employment (conditional on participation). Labour market participation also refers to a process of economic exclusion, and it is arguably associated with different factors such as, among others, material deprivation at origin, economic cycles, and employers' decisions/discrimination (Jackson et al. 2005).

Finally, once participation in the labour force and market is achieved, occupational attainment, as a process of economic inclusion, is likely to depend on the starting class position at origin, human capital, and performance in the workplace. It is therefore important to identify who is left behind in each selection process, and to assess whether immigrants are more likely to encounter more difficulties than natives. The aim is therefore to identify which non-ethnic factors contribute in each of these stages to explain ethnic differences. Each empirical chapter combines migration, labour market, and social and gender stratification theories to explain ethnic-origin labour market differentials in these different outcomes for men and women separately. I focus particularly on how the characteristics and behaviour of the previous generation, i.e. the migrant generation, might potentially affect the labour-market outcomes and social position of their offspring, and discuss the extent to which this can shed new light on the debate on the existence of the so-called ethnic-origin penalties/premiums in the labour market.

*Graph 1.8 Barriers to occupational attainment in the host society*




*Chapter 3* is the first empirical chapter. It draws upon mobility research to test whether either differences or commonalities prevail in intergenerational class mobility and retention patterns between immigrant and native men and women. To this aim, I first look at absolute mobility patterns, i.e. differences in the starting class position of different ethnic-origin groups and changes in the class distribution of their offspring; to then move to the study of fluidity, i.e. free of structural constraints, focusing on whether relative chances vary by ethnic origin, or instead work similarly across groups. The main contribution of this chapter to the literature is the inclusion of 'non-employment' as both social origin and destination categories, and the calculation of group-specific relative mobility scores, comparing them with their respective absolute mobility patterns.

After the overall account on class structure and fluidity in chapter 3, *chapter 4* studies the process of selection into the labour force, the first barrier to occupational attainment. I depart from the fact that gender, migration status, and country of origin are strongly associated with labour-force participation. Thus, on one hand women tend to participate less than men and, on the other, first and second-generation immigrants have, on average, lower participation rates than natives, although with significant variation across ethnic-origin groups.

I first describe gender and immigrant gaps in labour-force participation, and focus on how these vary across ethnic origin categories and migration status. Then, I concentrate on origin

conditions and test whether and how women's decisions to participate in the labour force affect the labour market behaviour of the following generation. More concretely, I look at whether the work statuses of the mother and the mother-in-law at age 14 contribute, on top and along individual and couple-level characteristics, in explaining ethnic origin differences in the probability of female labour-force participation. Moreover, I also assess whether the intergenerational transmission of housewifery is stronger for some groups than others. Accounting for the labour market behaviour of the mother and the mother-in-law is a relevant contribution to existing research on immigrant differences in female labour force participation, which has mainly focussed on the effect of gender role attitudes. The labour market behaviour of the previous generation, which presents significant differences across ethnic origin groups, allow for addressing issues of endogeneity and ordering of the events, as well as for accounting for processes of intergenerational transmission of behavioural aspects on top of attitudes.

Acknowledging selection differentials into the labour force, *chapter 5* focuses on the direct and indirect effects of social origin on employment and occupational attainment. I first look at whether social origin —measured as both parental work status and occupation— explains ethnic origin differences on the probability of being (un)employed and attaining a particular occupational status. Then, as a central argument of the chapter, by means of an interaction term between social and ethnic origins, I test whether the former operates distinctively in the labour market for different groups for the two outcomes.

Within the theoretical framework of OED status attainment models initially introduced by Blau and Duncan (1967), and posteriorly adapted to the study of migration, i.e. O(M)ED models (Heath et al. 2008), I look at the mediating and moderating roles of education. Another main inquiry is to assess whether the processes underlying employment and occupational attainment outcomes of the second generation are more meritocratic than natives, and if the investment in human capital pays off equally for different groups.

This last empirical chapter ultimately complements the first one on social mobility, which draws mostly upon aggregated data. Thus, it does so by addressing the specific role of social origin on destination reporting the size of its effect, and discussing differences/similarities in the main mechanisms of intergenerational transmission of worklessness and high/low occupational attainment between male and female immigrants and natives. The main contribution of the first part of this chapter to existing research is its focus on worklessness at origin —being some ethnic origin groups clearly overrepresented in this category— and its association with employment at adulthood via different material and psychological mechanisms. In the second part, the main contribution is the treatment of the dependent variable

as categorical, including again the category non-employment at origin and destination and comparing the second generation of six different ethnic origin groups with natives. Both for employment and occupational attainment, the main contribution to the scarce available research is to assess whether, to which extent, and why the effect of social origin conditions varies across ethnic origin groups.

# CHAPTER 2. BASES FOR THE EMPIRICAL ANALYSES

This chapter provides the basic information on which the following empirical chapters are based. First, I introduce the data and discuss their validity for my research interests. Second, I explain the operationalization of the key ascriptive concepts used throughout the chapters, namely migration status and ethnic and social origins. For migration status and ethnic origin, I provide information on the sample size for each wave by gender.

## 2.1 *Understanding Society*: The UK Household Longitudinal Study (UKHLS)

*Understanding Society* (University of Essex, 2009-2015) is one of the most appropriate datasets in Europe for studying the experiences of immigrants and their offspring in the host society. It allows for proxying most of the theoretical notions discussed in this thesis. It is particularly useful for distinguishing among different generations of immigrants, and for a flexible definition of 'ethnicity'. The study, at its sixth wave, can be linked to the former *British Household Panel (BHPS)* and to administrative data. In the thesis I use waves 1-4, which cover the period 2009-2013. It is a large household annual survey of approximately 100,000 individuals (aged 16 or older) clustered in an initial representative sample of 40,000 households[13]. *Understanding Society* is a prospective study, although it also includes retrospective elements. The latter increase time depth, allowing for the reconstruction of life courses and the observation of how ascribed characteristics, past experiences, and behaviours might potentially affect educational and labour-market outcomes. The data collection method is mostly face-to-face interviews with the 'household reference person', and with every other individual within (or related to) the household unit separately.

*Understanding Society* is a multidisciplinary study. Data are collected around different themes aggregated in topic modules. The questionnaire contains mostly questions that are: repeated in every wave for the whole sample (e.g. job characteristics, labour-market activity, education aspirations, income); in-between wave, event-related questions (e.g. employment spells); intermittent or rotating questions (e.g. gender role attitudes); and retrospective questions asked once only and referring to the socio-demographic background of a person, and to other important aspects of his/her situation prior to entry into the study (e.g. first job, father's and mother's occupation). Moreover, the adult individual questionnaire includes 'extra-five-

[13] Household members include the household reference person and each adult respondent (aged 16+) in the household, plus children aged 10-15 who complete a self-completion youth questionnaire.

minutes questions'[14] especially developed for ethnicity-related research (see *table 2.1*) (Nandi and Platt 2012).

*Table 2.1 Content of the extra five-minutes sample*

| Wave 1 | Wave 2 | Wave 3 | Wave 4 | Wave 5 |
|---|---|---|---|---|
| Migration histories | Ethnic identity | Social networks | Debt and savings etc. | Ethnic identity |
| Employment discrimination | Political engagement | Employment discrimination | Religious behaviour | Employment discrimination |
| Remittances | — | Remittances | Service use | Ethnic group and sex of boss and co-workers |
| Harassment | — | Harassment | — | Harassment |
| 'Britishness' | — | — | — | Cultural participation |

Source: Retrieved from https://www.understandingsociety.ac.uk/about/ethnicity#part3.

A key feature of the study is the Ethnic Minority Boost (EMB) sample[15] of over 4,000 households. The EMB sample is clustered and stratified, and designed by means of an oversampling strategy based on ethnic-group identification. It consists of approximately 12,000 people (at wave 1) from different ethnic-minority backgrounds allowing for the possibility of conducting research across and within ethnic groups, and for looking at intergenerational changes (Knies 2016; McFall 2016). From these 12,000 observations, about 70 per cent are foreign born, and 30 per cent UK born. Up to about 5,000 refer to the largest five minority groups in the country[16] —i.e. a sample of approximately 1,000 persons per group. The rest includes all mixed backgrounds, Chinese, other Asians, and Middle Eastern, among others. In 2015, a new immigrant boost sample of around 3,000 households and 4,500 responding adults was added.

The oversampling of ethnic minorities is achieved by means of a sampling design strategy that consists in screening a large number of addresses from postcode sectors with an ethnic-minority concentration over 5%. Different groups are assigned to different selection probabilities, which can be adjusted/weighted in the empirical analyses, and are identified with

[14] These extra questions are also asked to a comparison sample extracted from the general population sample component, plus a sample of immigrants from areas below the 5% ethnicity density threshold, in order to test for different patterns of response.

[15] The EMB + the General Population (GP) + the BHPS samples comprise the whole sample for Great Britain and Northern Ireland.

[16] The five major minority groups in the UK are: (1) Indian (2) Pakistani (3) African (4) Caribbean (5) Bangladeshi —apart from Irish.

a screening question at the doorstep: 'Does anyone living in this household come from, or have parents or grandparents from any of the following ethnic groups?'[17] The use of this screening question is practical, not analytical, as it serves the objective of including internally coherent and sufficiently numerous groups to run meaningful analyses. It is therefore important not to confuse the screening question with the census one (Burton, Nandi, and Platt 2008).

With the 5% concentration rule, the sampling strategy acknowledges that the immigrant population in the United Kingdom is not evenly distributed across the territory. There are significant differences between urban and rural areas, especially between London and other cities, but also across London neighbourhoods/boroughs. In what comes next, I discuss the operationalization of the main analytical categories of the thesis, namely migration status, and ethnic and social origin.

In sum, the EMB sample is not in itself an analytical one. It is analysed, with the use of appropriate design weights, alongside those who are sampled in the main part of the sample. The use of weights for the analyses corrects for unequal selection probabilities —which are significantly higher for ethnic minorities, e.g. Bangladeshis are 12 times more likely to be selected than natives—, clustering, and stratification (Lynn 2009).

### 2.2 Operationalization of analytical concepts

Dealing with measurement in migration research is not a straightforward task. Theoretically-based analytical categories contribute to narrowing the gap between inputs and outputs in statistical models. Although they represent two central constructs, migration status and ethnicity are often measured in different ways, either because of data constraints or due to diverse theoretical reasoning. Moreover, empirico–political traditions in different national contexts have also influenced the operationalization of these two constructs. *Understanding Society* explicitly deals with the measurement of aspects related to migration and ethnicity providing innovative insights for the study of ethnic inequalities in different domains (Burton et al. 2008; Burton, Nandi, and Platt 2010). In this thesis, I build mainly on the operationalization strategies of Cebolla-Boado (2007) and Dollmann et al. (2014).

[17] For specific details on the sampling strategy for the EMB sample see Berthoud et al. (2009).

*Migration status*

Migration status is a reliable analytical category in migration research as it is easily exportable to different national contexts. It basically summarizes the migration history of families from the perspective of a reference individual, and classifies persons according to their position in the number of generations in the host society, as immigrants are products of their past experiences. Ultimately, it allows for testing the immigrant effect in the labour market, and the competing hypotheses of improvement over time *versus* cumulative disadvantage —i.e. the initial disadvantage faced by the first generation persists in the second—, as defended by assimilation and segmented assimilation theories respectively.

To operationalise migration status, I use information on parents and paternal and maternal grandparents' place of birth. Information on the country of birth of the grandparents is a necessary condition for the identification of the third generation, but also to account for differences within the second as I will discuss next (Heath, Schneider, and Butt 2016). To assign a particular migration status category to a person I take into account a combination of country of birth, and type of parental and grandparental couple. Moreover, to make distinctions within the first generation, I also consider age upon arrival in the UK.

Migration status, as defined by Alba (1988), is basically the ancestral distance from the point of arrival in a host society of immigrants. Its construction is based on a top-down approach, in which the respondent is the reference point. Then, when necessary, information on the country of birth of parents first, and grandparents second, is used to assign individuals to different categories (see *graph 2.1*). Dollmann et al. (2014:10–13) distinguish between thirteen categories apart from natives. In order of ancestral distance, these categories are: 1$^{st}$, 1.25$^{th}$, 1.5$^{th}$, 1.75$^{th}$, 2$^{nd}$, 2.5$^{th}$, 2.75$^{th}$, Interethnic 2$^{nd}$, 3$^{rd}$, 3.25$^{th}$, 3.5$^{th}$, Interethnic 3$^{rd}$, and 3.75$^{th}$ generations.

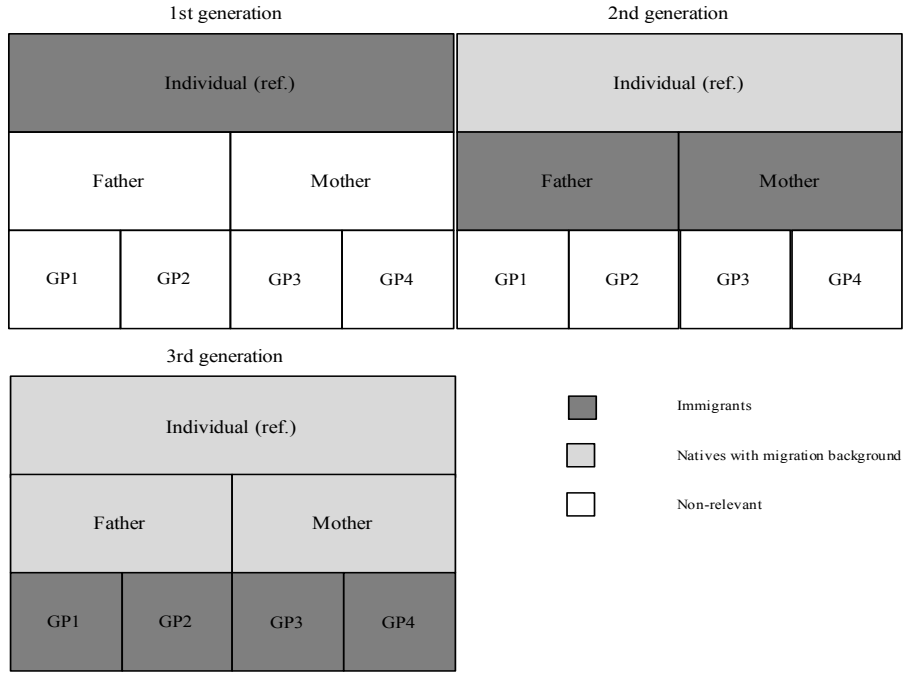
First-generation immigrants are foreign-born persons who themselves migrated to the UK. Information on the country of birth of ancestors is therefore not needed for defining their migration status. We can add detail to the category first generation by looking at the age at arrival. Thus, if they arrived after the age of 10 they belong to the 1.25$^{th}$ generation; if they arrived between ages 6 and 10 to the 1.5$^{th}$ generation; and before age 6 to the 1.75$^{th}$ generation[18]. The effect of time is of central importance, as many initial disadvantages in the labour market related to migration are basically a matter of time in themselves.

[18] The upper-bound for age at arrival can be modified depending on the outcome of interest.

UK-born persons with foreign-born parents are classified into the second generation, and consequently information on grandparental countries of birth is not relevant. However, as in the case of the first generation, we can further divide the second. If one of the parents is born in the UK, but the other is not, and he/she is a descendant of foreign-born ancestors (i.e. the parent in question is a second-generation immigrant), the reference person belongs to the 2.5$^{th}$ generation. On the other hand, a person belongs to the 2.75$^{th}$ generation if one parent of the parent born in the UK is also born in the UK and the other abroad. We can also identify an 'interethnic second generation' when both parents of the native-born parent were also born in the UK. For all these cases, the countries of birth of the parents of the foreign-born parent are irrelevant since they themselves were first-generation immigrants.

Following with the logic of the top-down approach, one belongs to the third generation if he or she was born in the UK, his/her parents too, and his/her grandparents were all born in another country. Depending on the grandparental composition in terms of country of birth, the third generation can be divided into four other categories. In the case of the 3.25$^{th}$ generation, three grandparents are foreign-born and one native-born. Those individuals belonging to the 3.5$^{th}$ generation are characterized for having two foreign-born grandparents, with the particularity that each of their parents have only one foreign-born ancestor —i.e. one parent born abroad and the other in the UK. As for the second generation, we can also define an 'interethnic third generation', in which both parents of one parent were also born in the UK, and the other two grandparents were not. The 3.75$^{th}$ generation is defined when only one grandparent is foreign-born. Finally, the British or native category includes UK-born persons whose parents, and grandfathers and grandmothers, were also born in the United Kingdom.

*Graph 2.1 Top-down approach for the construction of 'migration status', graphical examples for the three main categories*




Source: Adapted by the author from Dollmann et al. (2014).

In *table 2.2* I report the absolute and relative size of the main migration status groups in the sample by wave and sex. As shown in the table, there are acceptable sub-samples for the first and second generation categories, comprising 18 and 15 percent of the sample in wave 1 respectively. In the case of the third generation instead, we can anticipate that there will be insufficient numbers to keep it as a separated analytical category in the models. For the analyses in chapters 3-5, and due to data constraints, I only differentiate between the first and the second (plus) generation, which includes from migrants arrived before age 14 to the third generation.

*Table 2.2 Frequencies and column percentages for migration status by wave and sex*

| | W1 | | W2 | | W3 | | W4 | |
|---|---|---|---|---|---|---|---|---|
| Categories: | Men | Women | Men | Women | Men | Women | Men | Women |
| 1. First generation | 3,722 | 4,151 | 3,393 | 4,111 | 2,906 | 3,615 | 2,737 | 3,453 |
| Col. % | 18.2 | 16.2 | 17.07 | 16.33 | 16.47 | 16.07 | 16.78 | 16.6 |
| 2. Second generation | 3,162 | 3,986 | 2,383 | 2,933 | 2,203 | 2,721 | 2,072 | 2,518 |
| Col. % | 15.47 | 15.56 | 11.99 | 11.65 | 12.48 | 12.09 | 12.7 | 12.11 |
| 3. Third generation | 1,420 | 1,911 | 1,348 | 1,827 | 1,185 | 1,652 | 1,097 | 1,538 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Col. % | 6.95 | 7.46 | 6.78 | 7.26 | 6.71 | 7.34 | 6.73 | 7.4 |
| 4. Natives | 12,141 | 15,577 | 12,750 | 16,301 | 11,354 | 14,514 | 10,406 | 13,288 |
| Col. % | 59.38 | 60.79 | 64.15 | 64.76 | 64.34 | 64.5 | 63.79 | 63.89 |
| Total | 20,445 | 25,625 | 19,874 | 25,172 | 17,648 | 22,502 | 16,312 | 20,797 |
| Col. % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Notes: The second generation includes foreign-born persons arrived before age 14.
Source: *Understanding Society*, waves 1-4, author's analysis.

Why is it theoretically important to distinguish between immigrant generations, and to further differentiate among them based on the type of parental and grandparental unions? The variable 'migration status', as defined here, captures both a generation and a mixed-family effect. In terms of generation, being born in the host country implies early socialization, which is likely to be positively associated with future life course outcomes. As a result, when planning to invest in human capital for instance, decisions and choices are more likely to be based on country-specific information. If we consider third generations, this is even truer as there is already a previous educational and labour market experience of the parents, also born in the host country. This is however not the case for the first generation, more likely to encounter problems related to the transferability of human capital and skills. These problems might be more or less accentuated depending on age at arrival, origin-destination labour market (dis)similarities, educational qualifications, reasons for migration, and legal status among other factors (Chiswick, Lee, and Miller 2003; Friedberg 2000). Aspirations and expectations are also likely to vary across generations. For the first generation these tend to be more tied to the country of origin, while second and third generation immigrants are more likely to change their reference framework being more disconnected from the country of the family by comparing themselves to natives in terms of educational and occupational aspirations/objectives (Portes and Hao 2004).

Although its advantages, the application in migration research of the genealogical approach is not exempt of analytical problems mainly related to age, period, and cohort effects. First, we should be aware that people belonging to the same immigrant generation might have entered the labour market, for instance, in different historical periods. Thus, facing particular period-related conditions, coming from a different society with respect to those who left earlier or later, and encountering a different host society compared to those who arrived before or after. We should have therefore a historically grounded understanding of generation by checking the timing and length of the period of migration of different origin groups and individuals (Berg 2014; Heath and Li 2008).

A second important aspect is that when families migrate together (and this also concerns the first generation), different generations are migrating at once. If we do not define a delimited age group of interest, we might end up having a large age range within one generational category. These problems, related to the first generation, might be accentuated in the case of second and third generations, as "marriages are not necessarily 'generation' homogeneous or ethnically endogamous" (Kertzer 1983a:141). To address all these issues, it is important to consider the relevance of the variables age and period upon arrival, and to consider cohort differences when there is age overlap among the generations defined. As a solution, some authors have proposed the use of the term 'generational cohort' to increase the precision of the categories of the variable migration status. The mainstream approach has tended however to limit the concept of generation to relations of kinship descent.

We could expect this immigrant generation effect to be somehow affected in practice by the fact that either yourself, your parents, or your grandparents formed exclusively immigrant couples or, instead, married or partnered a man or a woman born in the United Kingdom, and formed a mixed couple[19]. If this was the case, we could defend the idea that the lack of detailed knowledge of immigrants about key institutions of the host society might be compensated. This aspect can have a positive effect on the socialization of persons belonging to the second and third generations, as they are likely to have as a consequence a more informed behaviour in the educational system and the labour market (Cebolla-Boado 2007; Muttarak 2007; Muttarak and Heath 2010).

We could also argue that mixed families are more likely to promote acculturation or discourage ethnic attachment, a process that might have an impact on the transmission of language skills or religious practices for example (Cebolla-Boado 2007). This 'advantageous' effect of mixed families could refer however to the fact that this type of families are not randomly constituted. Thus, research on the field demonstrates that there tends to be positive self-selection of individuals with similar 'favourable characteristics' which make them more prone to break intra-group marriage norms. Previous educational attainment is often the main propitious factor for constituting a mixed family (González-Ferrer 2006; Kulu and González-Ferrer 2014; Platt 2012).

[19] The operationalization of 'mixed' in the migration status variable only refers to inter marriages/partnerships between immigrants (or foreign-born) and British-born. Other types of inter-ethnic marriages are not considered (e.g. between two foreign-born living in the UK, or between two native born of different ethnic groups). In the UK, according to Lanzieri (2012) approximately 9% of the marriages include a foreign-born spouse. This is not the highest figure in Europe, as the percentage for France for example is 12%.

Intermarriage is unequally distributed across ethnic-origin groups, and group size makes a difference. Different ethnic origin groups present diverse inter and intra-marriage/partnership behaviours. One of the most endogamous groups is the UK-born, with 85% cohabiting in an endogamous partnership —vs. 60% for the foreign-born (OECD/European Union 2015). In general terms, we expect that those groups that have been in the country for a shorter period, as well as those that are more 'culturally distant' with respect to natives, to be more likely to marry within their own group. In the UK, Indians, Pakistanis and Bangladeshis usually have the highest percentages of intra-marriage/partnership, and Irish the lowest. Jamaicans also present relatively high intermarriage/partnership rates compared to other groups, although still far from the Irish. In the case of Jamaicans, one plausible explanation could be related to the fact that, compared to other ethnic-origin groups, they present the highest share of UK-born (Platt 2012). Different patterns might also apply for men and women. UK-born women are often less prone, compared to UK-born men, to marry or partner a person with a different ethnic origin. Moreover, women from the majority of the ethnic-origin groups considered are also more prone to marry or partner persons of their same origin than men, with the exception of Indian women.

In sum, we could claim that there might be an *intermarriage premium* —although we could also expect a *penalty* for some groups and particular levels of social origin— for descendants or direct members of mixed couples, as inter-marriage/partnership has been increasingly defined in the literature as a key factor facilitating the process of economic incorporation of immigrants. We need to be aware however of endogeneity problems associated with positive self-selection into mixed couples (i.e. unmeasured factors) when looking at the effect of mixed family background on labour-market outcomes (Muttarak and Heath 2010). The nature of this intermarriage effect needs to be further investigated, as the outcomes of descendants and current members of inter-ethnic or mixed couples are under-researched in quantitative sociology in the United Kingdom and elsewhere (Platt 2012). I do not address in this thesis however inter-ethnic marriage effects in the empirical chapters, and neither the effects of inter-migration marriage, or marrying foreign-born spouses from the country of origin. In my view, it would be interesting that future research on migration and social mobility could address and isolate the effect of intermarriage (ethnic or migration) on labour market outcomes.

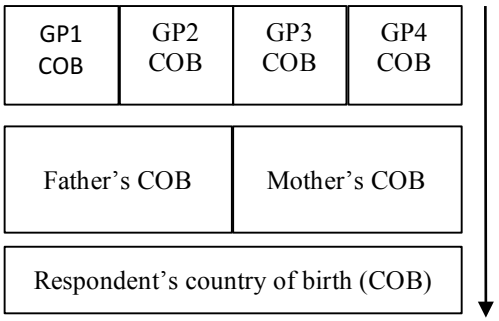
*Ethnic origin*

If different approaches are found for the construction of the migration status variable, in the case of ethnicity we encounter even less consistent practices. The *Understanding Society* study facilitates flexibility in the operationalization of this construct through the country of birth of the ancestors, subjective identity, language, and nationality among other indicators. Two are the most common practices in the literature: ethnic origin —defined by the country of birth of the ancestors—, and ethnic identity —or individuals' self-identification among a list of already defined ethnic response categories. The first approach is often used in continental Europe, while the second predominates in the Anglo-Saxon context. These two variables test from slightly different perspectives the role of ethnicity in explaining labour-market outcomes. I discard the option of nationality for measuring ethnicity, as naturalization is a common practice in Western countries, and therefore citizenship tends to under-represent members of ethnic groups by making impossible to identify them (Cebolla-Boado 2007).

Most authors agree with the idea that country of birth is the least biased criterion to estimate the size of the immigrant population (OECD/European Union 2015). As Dollmann et al. (2014) point out, the use of country of birth information of the ancestors to construct a variable of ethnic origin provides measurement stability and robustness. Moreover, its procedure is directly linked to the one followed for the case of migration status. Contrarily though, to construct this variable a bottom-up approach is needed. Thus, to assign respondents to an ethnic origin category we start at the grandparental level and descend when required. The operationalization of ethnic origin is more complex than the one of migration status. The information for all actors is not dichotomous anymore, and multiple responses and combinations regarding respondents and ancestors' country of birth are possible (see *graph 2.2*).

Despite its complexity, an ethnic origin variable based on the country of birth of three generations offers important insights with meaningful implications in terms of outcomes in the host society which would be otherwise missed. This is the case for example of persons with African-Indian origins, as mentioned above. Thus, without information on the country of birth of the Indian grandparents who migrated to East Africa at the end of the 19$^{th}$ Century, and then emigrated (African-born parents) to the UK in the 1960s, and had children who are now in the labour market (respondents), we would misclassify the latter as African. This is just an example of many other possible combinations that a two-generation approach would not be able capture (Heath et al. 2016).

*Graph 2.2 Bottom-up approach for the construction of the variable 'ethnic origin' (initial graphical representation)*




Notes: Adapted by the author from Dollmann et al. (2014).

Due to the added measurement complexity we need to make further assumptions. I start at the grandparental level by first defining a simple majority rule, which consists on assigning individuals the country of birth of the majority (i.e. at least three) of their grandparents. In this way, parental and own countries of birth are irrelevant for defining the ethnic origin of a given individual. This majority rule extends to the cases in which either two grandparents are foreign-born but come from the same country, and the other two are foreign-born but come from different countries, and also to those cases in which two grandparents are foreign-born, and the other two native-born. Regarding the latter, we do not have technically a majority but we neglect information on native-born grandparents, as this information is not relevant for the generation of a country of origin variable for individuals for whom we already know that a migration background exists.

For the cases in which the majority rule does not apply (i.e. two grandparents are born in one foreign country and the other two in another, or all four grandparents are born in different foreign countries), I follow a grandparental priority rule. This implies that the concrete country of birth of a specific grandparent now defines the country of origin of an individual. In this way, I give priority to the country of birth of the maternal grandmother (Dollmann, Jacob, and Kalter 2014). For the cases in which the maternal grandmother is born in the survey country and the other grandparents in three different countries, the maternal grandfather determines the ethnic origin of an individual. If the latter is also born in the host country, I use the country of birth of the paternal grandmother regardless of the country of origin of the paternal grandfather. If the three mentioned grandparents are born in the UK, I use the information about the country of

birth of the paternal grandfather of the respondent to define ethnic origin. If the information about grandparents shows that they are all born in the UK, I consider the information at the parental level following the same logic we used for the grandparents. Finally, if parents and grandparents are all born in the UK, we look at the respondent's level to define ethnic origin.

After this categorization, some inconsistencies still remain due to missing cases in the data and to 'non-standard migration histories'. To address this issue, I use complementary information on the ethnic identity of both the parents and the respondent[20]. More concretely, I use a common variable in the United Kingdom which asks respondents directly to identify with an ethnic category based on the 2011 census. Compared to migration status and ethnic origin, ethnic identity is a subjective variable in the sense that individuals themselves subscribe to categories of an already defined ethnic classification. As Dollmann et al. (2014) argue, ethnic identity might be endogenous to the integration process. Thus, after several generations we might lose track of the immigrant population obtaining a biased picture due to a plausible and most likely non-random increasing identification of individuals with the predominant identity of the receiving country. By using current ethnic identity we might incur therefore in what has been termed as a problem of 'leakage' (Heath et al. 2016:7; Wimmer 2009).

In *table 2.3* I report frequencies and column percentages of the main ethnic-origin groups in the sample by wave and gender. Irish and Indian origins present, after natives, the highest number of observations, with more than 1,000 cases for men and women separately. The rest of the groups represent about 3 to 5 percent of the sample in wave 1.

[20] For more specific details on how to build the ethnic origin variable see Dollmann et al. (2014:24–35).

*Table 2.3 Frequencies and column percentages for country of origin by wave and sex*

| | W1 | | W2 | | W3 | | W4 | |
|---|---|---|---|---|---|---|---|---|
| Categories: | Men | Women | Men | Women | Men | Women | Men | Women |
| 1. UK | 12,141 | 15,577 | 12,750 | 16,301 | 11,354 | 14,514 | 10,406 | 13,288 |
| Col. % | 69.65 | 71.38 | 74.85 | 75.82 | 74.85 | 75.49 | 74.16 | 75.15 |
| 2. IRL | 1,344 | 1,751 | 1,219 | 1,588 | 1,083 | 1,436 | 1,021 | 1,312 |
| Col. % | 7.71 | 8.02 | 7.16 | 7.39 | 7.14 | 7.47 | 7.28 | 7.42 |
| 3. IND | 1,209 | 1,189 | 968 | 982 | 845 | 850 | 801 | 832 |
| Col. % | 6.94 | 5.45 | 5.68 | 4.57 | 5.57 | 4.42 | 5.71 | 4.71 |
| 4. PAK | 789 | 875 | 639 | 745 | 593 | 706 | 575 | 673 |
| Col. % | 4.53 | 4.01 | 3.75 | 3.46 | 3.91 | 3.67 | 4.1 | 3.81 |
| 5. BNG | 649 | 632 | 493 | 493 | 414 | 468 | 401 | 448 |
| Col. % | 3.72 | 2.9 | 2.89 | 2.29 | 2.73 | 2.43 | 2.86 | 2.53 |
| 6. AFR | 712 | 929 | 530 | 719 | 472 | 644 | 453 | 570 |
| Col. % | 4.08 | 4.26 | 3.11 | 3.34 | 3.11 | 3.35 | 3.23 | 3.22 |
| 7. JAM | 587 | 870 | 435 | 673 | 407 | 609 | 375 | 560 |
| Col. % | 3.37 | 3.99 | 2.55 | 3.13 | 2.68 | 3.17 | 2.67 | 3.17 |
| Total | 17,431 | 21,823 | 17,034 | 21,501 | 15,168 | 19,227 | 14,032 | 17,683 |
| Col. % | 100 | 100 | 100 | 100 | 100 | 100 | 100 | 100 |

Source: *Understanding Society*, waves 1-4, author's analysis.

Another important aspect with respect to the ethnic identity variable is not to confuse its mixed category with the ones of migration status. While the former refers to a subjective state, the latter refers to an objective one. Regarding identity for example, a person could be born in the UK, have two immigrant parents, and feel mixed. This same individual would be categorized as a second generation immigrant in the migration status variable for instance. It is for these reasons that I use ethnic identity as a complementary variable instead as an analytical one.

In *table 2.4* I report frequencies and column percentages for each ethnic origin category over migration status again by men and women separately. The table shows that among men most first generation immigrants in the immigrant sample are Indian (30%) and African (21%), while Irish and Jamaican present the lowest percentage in this category. For women, numbers are similar in this regard. In what concerns to the second generation, differences across groups are less marked. Irish and Indian men and women present the highest share of second generation immigrants in the sample. Regarding the third generation, this is mainly composed by Irish descendants with 86% of the cases. In accordance with the migration historical inflows described above, Jamaican and Indian contribute with the rest of observations for this category.

*Table 2.4 Frequencies and column percentages for country of origin by migration status and sex*

| | 1st generation | | 2nd generation | | 3rd generation | |
|---|---|---|---|---|---|---|
| Categories: | Men | Women | Men | Women | Men | Women |
| 1. IRL | 117 | 168 | 508 | 639 | 710 | 924 |
| Col. % | 5.04 | 7.01 | 23.95 | 23.65 | 85.85 | 82.43 |
| 2. IND | 698 | 581 | 461 | 531 | 49 | 74 |
| Col. % | 30.06 | 24.24 | 21.74 | 19.65 | 5.93 | 6.6 |
| 3. PAK | 425 | 417 | 356 | 449 | 5 | 9 |
| Col. % | 18.3 | 17.4 | 16.78 | 16.62 | 0.6 | 0.8 |
| 4. BNG | 372 | 312 | 273 | 317 | 2 | 3 |
| Col. % | 16.02 | 13.02 | 12.87 | 11.73 | 0.24 | 0.27 |
| 5. AFR | 497 | 663 | 201 | 249 | 13 | 17 |
| Col. % | 21.4 | 27.66 | 9.48 | 9.22 | 1.57 | 1.52 |
| 6. JAM | 213 | 256 | 322 | 517 | 48 | 94 |
| Col. % | 9.17 | 10.68 | 15.18 | 19.13 | 5.8 | 8.39 |
| Total | 2,322 | 2,397 | 2,121 | 2,702 | 827 | 1,121 |
| Col. % | 100 | 100 | 100 | 100 | 100 | 100 |

Notes: The second generation includes foreign-born persons arrived before age 14.
Source: *Understanding Society*, wave 1, author's analysis.

In sum, migration status and ethnic origin should be seen as complementary. On one hand, migration status might for instance shed light on intergenerational changes in attitudes and outcomes within ethnic groups. On the other, ethnic origin distinguishes persons within a given migration status category (e.g. second generation), which might for instance allow us to unravel, among other processes, possible discriminatory practices in some sectors of the labour market in which ethnicity might prevail. I have also argued though that even if the concept of immigrant generation presents clear analytical advantages for migration research, we should also be aware of its caveats, and place it in a specific historical context. I move next to elaborate on this last point based on the migration histories of the different ethnic-origin groups studied.

*The concept of generation and the importance of migration histories*

To resume the discussion on the analytical challenges of the genealogical approach to migrants in the previous sub-sections, I look at between and within ethnic group variation in year and age at arrival for the first generation. Then, also differentiating by ethnic origin, I compare the age distributions of first and second generation immigrants between them and separately with that of natives. I select men and women between age 16 and 64. I am aware of the fact that in

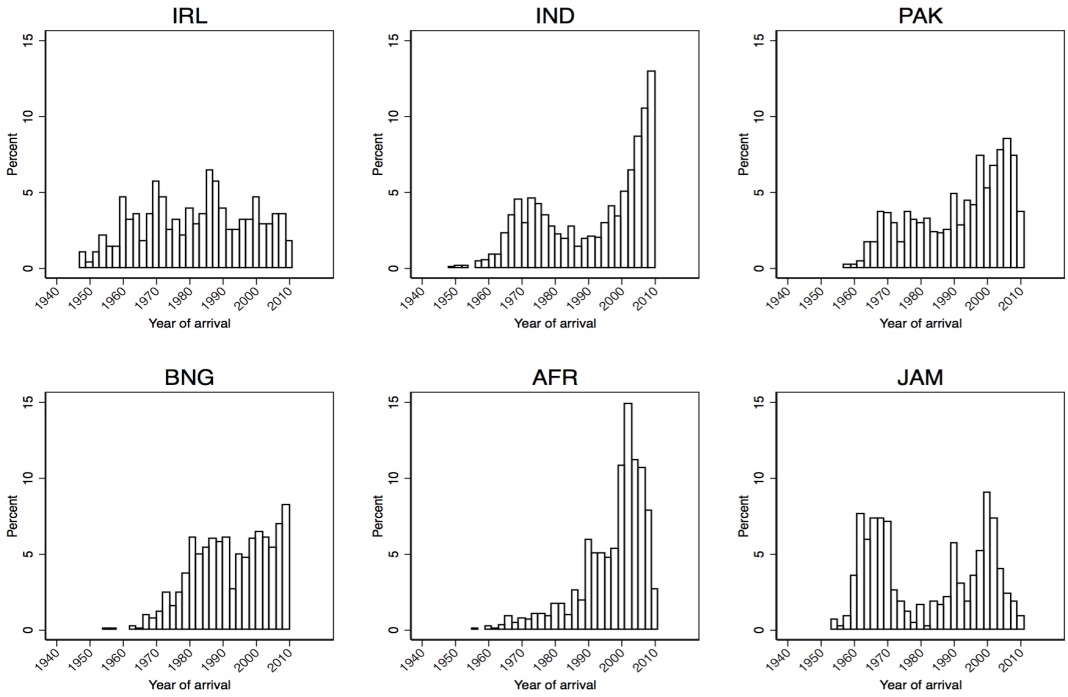
the case of women pension age is, by the latest wave used, lower compared to men in the UK —i.e. at age 62. Nevertheless, retired persons are excluded from the analyses, and therefore women aged above 62 are not included in the final analytical sample.

Age, period, and cohort differences among the first generation determine the composition of the second. It is crucial therefore to reconstruct the migration histories of the former before studying the latter. The analysis of within group variation in age, and year and age at arrival, allows for both a cohort and a historical understanding of immigrant generations (Kertzer 1983). We are able to identify for instance people with the same migration status and from the same ethnic group who grew up and lived in different historical periods. The study of within group variation in these three variables is of special relevance for the main argument of this thesis. It contributes in challenging the idea of immigrant generations and ethnic groups as self-explanatory cohesive entities, and shift the attention to non-ethnic explanations (Berg 2014).

One of the analytical problems Kertzer (1983) identifies with the use of genealogically defined first and second generations is that the members of one same immigrant generation can leave their home country and settle in the host society in significantly different historical periods with different characteristics and opportunities. *Graph 2.3* shows that for some groups this is indeed the case. On one extreme, we find first generation Africans, with the highest concentration of arrivals in a relatively short period of time —i.e. 1990s-2000s. On the other, we find Irish[21], with a multimodal distribution of arrivals extending more or less homogeneously throughout the whole period studied. For Jamaicans, a clear bimodal distribution is observed with one peak in the 1960s, and another in the 1990s/2000s. This is also true, to a lesser extent, for Indians, while the distributions of Pakistanis and Bangladeshis lean more towards a pattern of progressively increasing arrivals over the period.

[21] There are however few observation of first generation Irish in the dataset, as they are more highly concentrated in the second and third generation, as I have reported in *table 2.4*.

*Graph 2.3 Distribution of the year of arrival of 1st generation immigrants by ethnic origin*

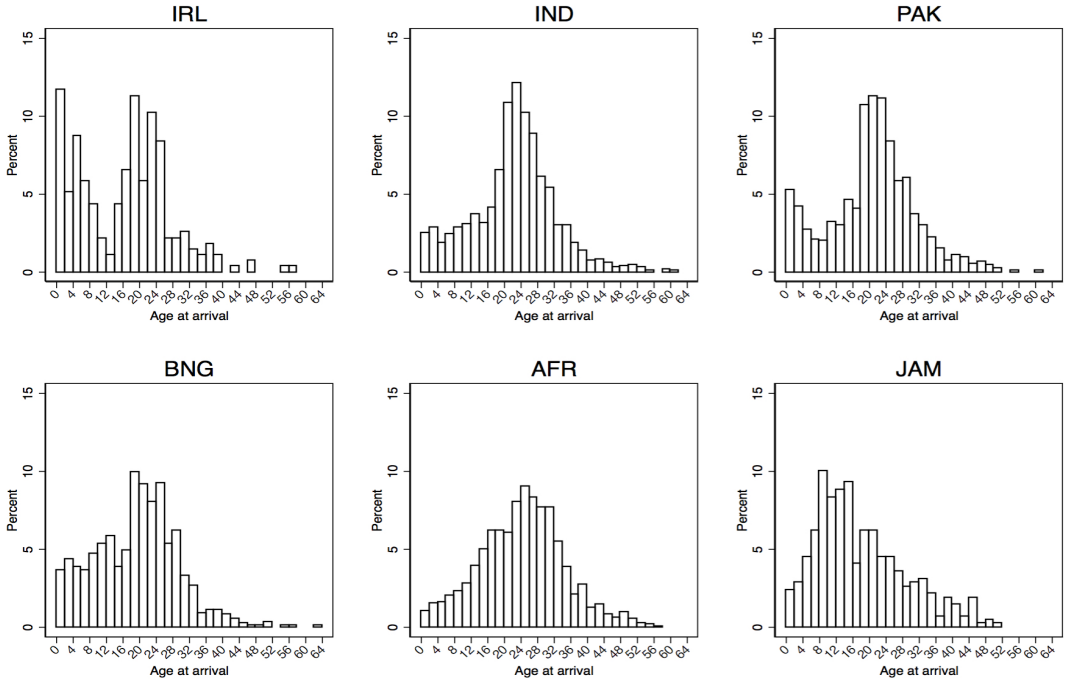



Source: *Understanding Society*, wave 1, author's analysis.

Kertzer (1983) also points out that more than one generation might migrate at the same time, for example when a family migrates together. A way of unravelling whether generations migrate at the same time for the different ethnic-origin groups is to look at the distribution of age at arrival of the first generation. *Graph 2.4* shows that this seems to be the case of Irish, with a clear bimodal distribution. Moreover, first generation Irish present the highest dispersion in age at arrival of all groups. The second group with more variation in this regard are Jamaicans. We should however be aware of the fact that the observed distributions for these two groups might be affected by processes of remigration (i.e. return migration to the country of origin) and mortality given their older age distributions. In comparison, migrants from the rest of the groups arrived in the UK at younger ages as their respective right-skewed distributions show. The age at arrival for the rest of the groups is more highly concentrated around early adulthood ages (common in migration processes), although with also some within group variation. The problem related to age at arrival is however often partly solved by the

genealogical approach by including first generation immigrants below a certain age (often 10 years old) in the second generation[22].

*Graph 2.4 Distribution of the age at arrival of first generation immigrants by ethnic origin*

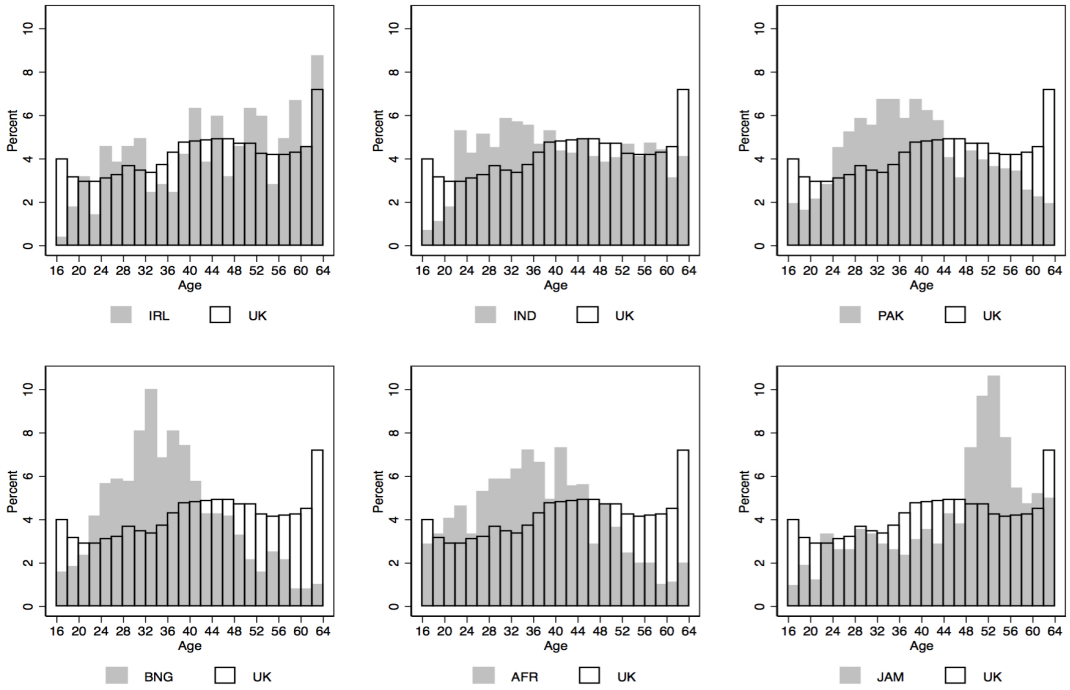



Source: *Understanding Society*, wave 1, author's analysis.

Another criticism to the genealogical approach, related to the previous one, is that within the same immigrant generation we might find a wide age range. *Graphs 2.5* and *2.6* show the age distribution of first and second generation immigrants by ethnic origin and superimpose it to that of natives —the common comparison group in migration research. The blank bars represent to the age distribution of natives, and the grey ones the age distribution of each ethnic group being compared in each sub-graph.

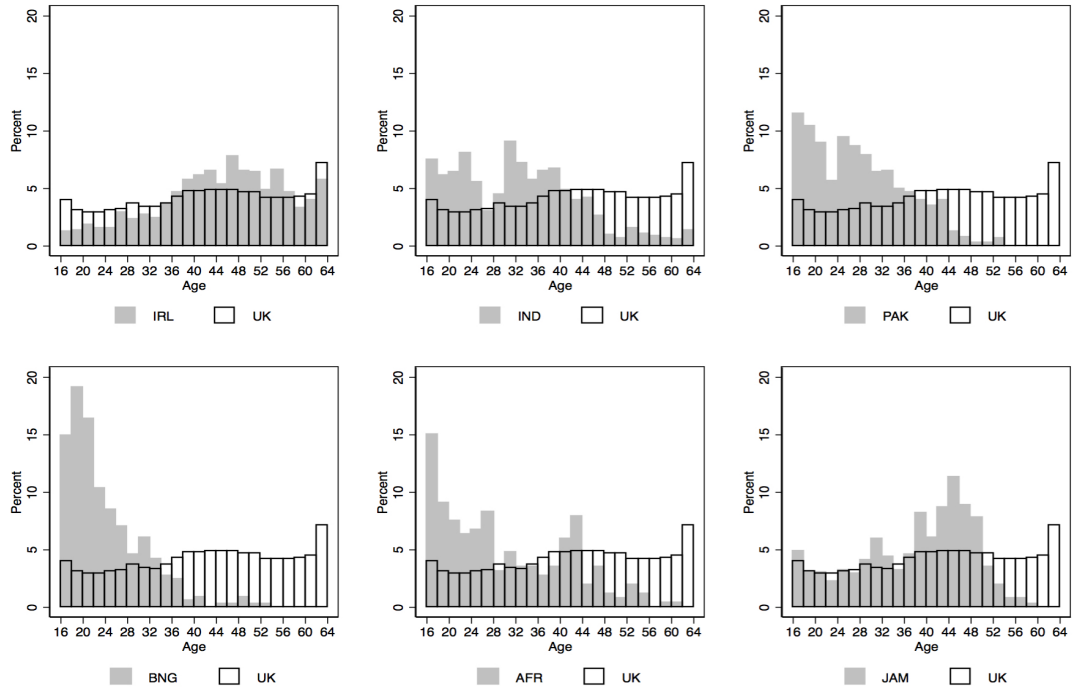
[22] This is the approach taken in this thesis.

*Graph 2.5 Differences in the age distributions of first generation immigrants (by ethnic origin) and natives*




Source: *Understanding Society*, wave 1, author's analysis.

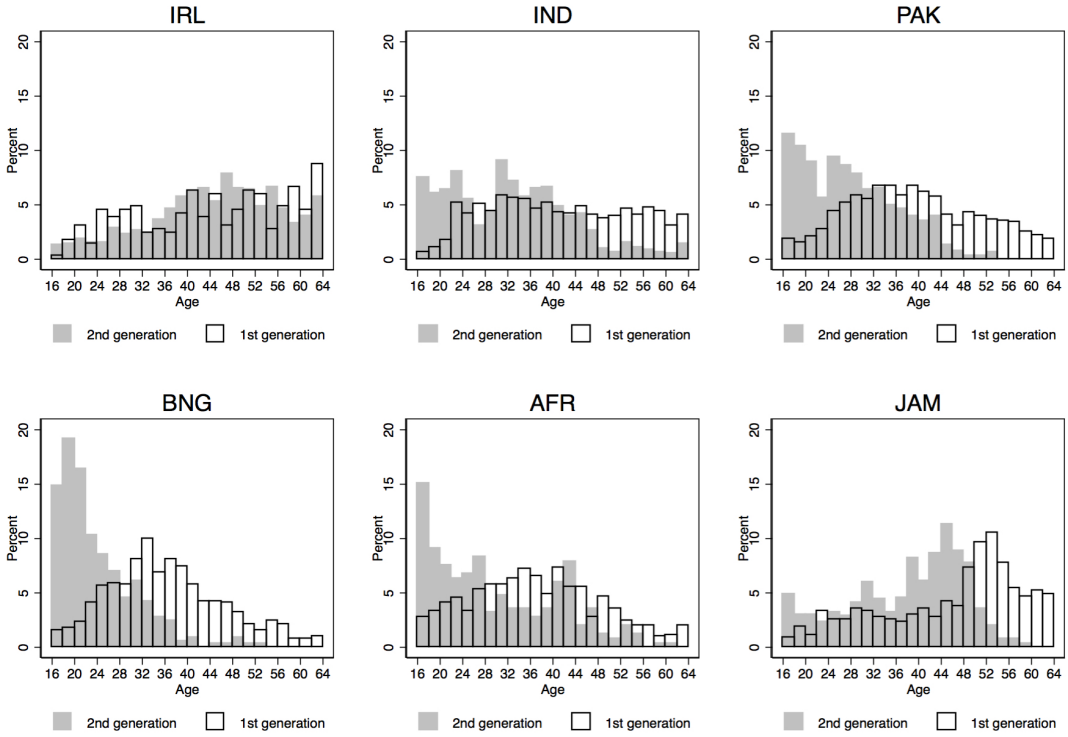
*Graph 2.6 Differences in the age distributions of second generation immigrants (by ethnic origin) and natives*




Source: *Understanding Society*, wave 1, author's analysis.

Compared to the rest of the groups and natives, first generation Irish and Jamaicans have a more aged or left-skewed distribution. The second generation of these two groups is also significantly older comparatively. For the rest of the groups —Indians to a lesser extent—, we observe right-skewed distributions compared with natives, especially for the second generation. We can also compare the age distributions of the first and second generation by each ethnic origin to assess their age overlap (see graph 2.7). As one could expect, for all groups the second generation is younger than the first. For the Irish though, this is not as clear as for the other groups, as they present the highest age overlap between the two age distributions. For Bangladeshis and Africans on the contrary, we clearly observe a young second generation and an older first one.

*Graph 2.7 Overlap in the age distributions of first and second generation immigrants by ethnic origin*




Source: *Understanding Society*, wave 1, author's analysis.

There are more heterogeneous groups than others when it comes to within-group variation in age. The most homogeneous[23] among the first generation are Bangladeshis, Africans, Pakistanis, and Jamaicans. On the other hand, Irish and Indians have more heterogeneous age distributions. Among the second generation, Bangladeshis and Pakistanis are the most homogeneous. This implies that the second generation of these groups were born at similar historical periods, and consequently also entered the labour market at a similar time. For the rest of the groups dispersion is higher, especially in the case of Africans. This is an important aspect to be borne in mind in the interpretation of the findings in the empirical analyses, even if we control for age/cohort.

In sum, I defend the idea that a historical complement to the genealogical approach is key for the purpose of this thesis of providing non-ethnic explanations to ethnic disadvantage in the labour market. Thus, this complement acknowledges the historical context of the ahistorical construct of immigrant generation. It identifies heterogeneity within immigrant generations (by ethnic-origin group) in three central factors in labour market and inequality research: age, period, and cohort. I move next to the operationalization of social origin, which I expect to be highly interrelated to migration status, ethnic origin, and gender in explaining labour market disadvantage.

*Social origin*

Social origin remains still as one of the best predictors of social destination in Western democracies (Bernardi and Ballarino 2016; Ermisch, Jäntti, and Smeeding 2012; Smeeding, Erikson, and Jäntii 2011). Parental occupational status —usually measured as a continuous variable—, and social class —measured as a categorical/nominal variable— are commonly used to operationalize this concept in sociology (Evans 1992). While occupational status refers to the fact that some occupations are more desirable or better than others; social class focuses more on the idea that people working in the same or similar occupations, with similar levels of responsibility, share certain experiences, becoming as a result also similar to one another in terms of taste and behaviour. Thus, class is often used as a proxy for parents' income and networks. In the last decades, different harmonized measures of occupational status and social class have substituted national versions with the aim of fostering cross-national comparisons while adapting over time to the changing dynamic of the labour market.

[23] Observations are more highly concentrated within a short age range.

Social background has however more dimensions than the two described, with several mechanisms relating it to outcomes. As shown in *table 2.5*, we can differentiate between two groups of origin factors: socio-cultural and economic-material resources in the family. While indicators for economic-material resources are more often used, the effect of socio-cultural indicators such as parental education or status is less often tested. The key question refers to whether we observe different OD associations depending on the indicator of social background we use, and the extent to which these vary by gender, cognitive ability, and education. As Erikson (2016) argues, the importance of socio-cultural resources has increased for women over time for instance.

*Table 2.5 Dimensions of social background*

| *Groups of origin factors* | *Indicators* |
|---|---|
| 1. Socio-cultural resources | Aspirations/expectations, parental education, and status |
| 2. Economic-material resources | Parental occupation, class, and earnings |

*Understanding Society* provides relevant complementary information for social origin such as the parental employment status at the age of 14. I recodify this variable into a dummy (1=father/mother not working; 0=father/mother working), and combine the information for both parents. This results in a variable with three different categories: (1) *workless household*, in which both parents were either unemployed or not working when the respondent was aged 14; (2) *single-earning household*, in which only one parent was employed and the other either unemployed or not working; and (3) *dual-earning household*, in which both parents were employed. This is a variable of interest to test the effect of social origin on labour-market outcomes as others, using UK data, have found that children of non-working parents are less likely to work themselves, and if they do, to be on average less satisfied with their jobs controlling for other factors such as wages (Schoon et al. 2012; Zwysen 2013).

With UKHLS data, we are also able to operationalise social origin through parental occupational status. I follow a dominance approach to combine the occupations of the mother and the father when the respondent was 14 years old. The occupational status of the parents is often measured using the stratification scale known as *International Socio-Economic Index (ISEI)* (Ganzeboom, De Graaf, and Treiman 1992; Ganzeboom and Treiman 1996, 2003). ISEI

scores are basically an instrument to relate human resources and economic outcomes. It assigns a numeric value to occupations based on their average education and income levels, with the purpose of showing how the occupational structure has an impact on the conversion of education qualifications into income. I obtain a continuous hierarchical scale ranging from 16 to 90 in the sample. To obtain ISEI scores I first transform the UK *Standard Occupational Classification - SOC 2000* variable in the dataset to a four-digit *International Standard Classification of Occupations - ISCO88*. Then, using the ISKO Stata module developed by Hendrickx (2004), I recode the ISCO values into more informative ISEI scores.

For measuring class, I use instead the NS-SeC class classification scheme provided in the dataset. This is a UK-based measure, which together with its E-SeC homologue at the European level (Rose and Harrison 2007, 2010), build on the previous EGP and CASMIN classifications (Erikson, Goldthorpe, and Portocarero 1979). The main feature of these new classifications is that they make more explicit reference to women's occupations and employment relations, accounting for the incorporation and changing conditions for women in the labour market since the previous classifications were devized (Platt 2016). The NS-SeC classification places persons into different class positions depending on the combination of both their current/last occupation and their employment status. This is important as a self-employed car mechanic is placed in a different class than a car mechanic with 20 employees, and at the same time both are in a different class position than an employee car mechanic, who is also in a different class compared to a car mechanic supervisor.

The NS-SeC and the ESeC are categorical schemes measuring both relational and distributive issues, and only the three-category version is hierarchical. The NS-SeC has 17 operational categories which are often reduced to 8 analytical ones. These are: 1 'Higher managerial and professional occupations'; 2 'Lower managerial and professional occupations'; 3 'Intermediate occupations'; 4 'Small employers and own account workers'; 5 'Lower supervisory and technical occupations' 6 'Semi-routine occupations'; 7 'Routine occupations'; 8 'Never worked and long-term unemployed'. For the empirical analyses in this thesis, the NS-SeC 8-class schema is most of the time collapsed to its hierarchical version due to the low number of observations in some of its categories for specific ethnic-origin groups. I provide further details in chapters 3 and 5.

# CHAPTER 3. PATTERNS OF INTERGENERATIONAL SOCIAL MOBILITY: SECOND GENERATION IMMIGRANTS AND NATIVES COMPARED

> "When I speak of the declining significance of race, I am neither ignoring the legacy of the previous discrimination nor am I arguing that racial discrimination no longer exists. I am referring to the relative role race plays in determining black life chances in the modern industrial period —in other words, the changing impact of race in the economic sector and, in particular, the changing importance of race versus class for mobility opportunities."
>
> William Julius Wilson,
> *The Declining Significance of Race. Blacks and Changing American Institutions*

## 3.1 Introduction

In this chapter I test the extent to which there is inequality of opportunity in class attainment in the UK by studying intergenerational reproduction and mobility patterns [24]. I focus more specifically on the intersection between class of origin and other key ascribed characteristics such as migration status, ethnic origin, and sex. I compare origin (O) and destination (D) class distributions across the main second generation ethnic-origin groups in the sample, and calculate group specific OD class transition and retention patterns for men and women separately. I also address the questions of whether the OD association differs by ethnic origin (M)[25] in relative terms, and if its strength varies by gender within and between groups. The attempt of this first empirical chapter is therefore to describe, mostly at the aggregated level, how different second generation ethnic-origin groups fit into the social structure of the host society. Then, in the upcoming empirical chapters, I provide a more detailed account on how this process operates.

*Societal class and ethnic openness*

Societies can be either open or closed with respect to class, the main indicator of this being the degree to which social origin and attainment are associated (Breen and Jonsson 2005:229). The shape of the occupational structure in the UK has changed significantly since the 1950s as a

[24] While intergenerational mobility implies a change in the position in the class structure with respect to that of one's parents, reproduction refers to the idea of to which extent one is able to secure the position of his/her parents in the class structure when she/he reaches class maturity.

[25] 'M' stands for ethnic minority, I do not use 'E' as this is often the abbreviation for education in mobility studies.

response to two reinforcing processes. These are the gradual expansion of the salariat[26], and non-manual jobs more generally, on one hand, and the contraction of the working class on the other. This structural shift resulted initially in the creation of 'more room at the top' up until the 1970s[27], opening the possibility for higher levels of absolute net upward mobility across cohorts. In the last decades, this shift has however reversed progressively, resulting in higher associated risks of downward mobility for younger middle-class generations of men and women, as a higher number of people were increasingly starting from better-off class origins (Goldthorpe and Heath 2016; Paterson and Iannelli 2007).

Some authors argue, that changes in the class structure have not translated into changes in social fluidity[28], which has remained constant over time across birth cohorts (Erikson and Goldthorpe 1992). Inequality of opportunity in securing higher, as well as avoiding lower, class positions across different social backgrounds has therefore remained more or less unaltered, with no major differences between men and women (Breen and Goldthorpe 2001; Bukodi et al. 2015; Goldthorpe 2016). The argument of constant fluidity has however its competitors, with the comparative study of Breen (2004) *Social Mobility in Europe* being the most well-known. The author concludes that there is cross–country convergence in absolute mobility flows, and a trend towards increasing social fluidity. Breen's study also finds however that Britain has not shared this experience towards greater fluidity, standing out as the main 'rigid exception'. On the contrary, some authors have defended the existence of declining relative mobility (Blanden, Gregg, and Macmillan 2013); and others reach findings somehow in the middle, arguing that there has been a process of increasing social fluidity —with opportunities for upward mobility for those at the bottom of the social structure due to increasing 'room at the top'—, which has coexisted with noticeable class inequalities characterized by intergenerational immobility at the top (Devine and Li 2013; Heath and McMahon 2005).

Among the supporters of the idea of a constant flux, one of the main aspects that has contributed to relative stability, as Bukodi et al. (2015) argue in their recent study, is that, despite the context of educational expansion and reform, education behaves more as a relative (positional) rather than an absolute good. As a response to this, families tend to mobilise all their resources accordingly for their children to retain their competitive advantage. The UK is therefore a closed society class wise with existing differential life chances depending on

[26] In the text I use 'salariat' interchangeably with 'managerial and professional' classes.

[27] This period is also known as the golden age of mobility.

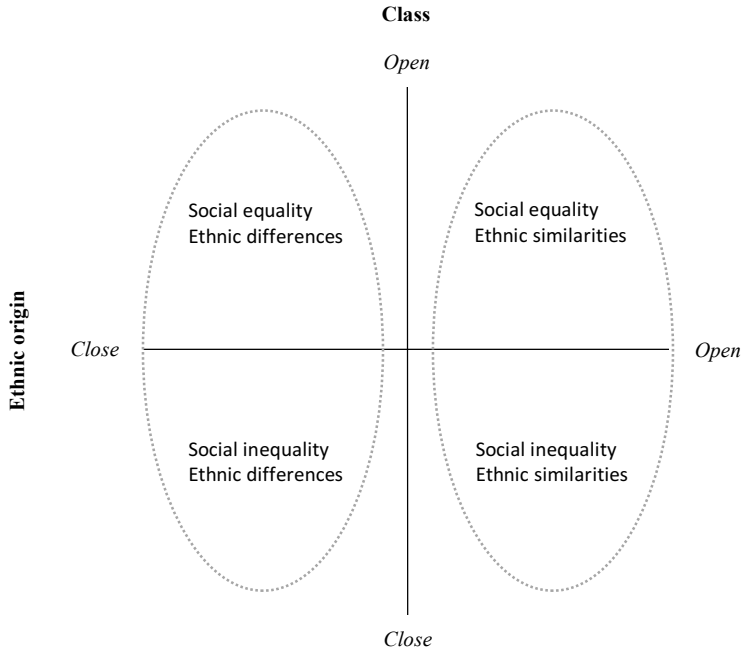
[28] Social fluidity refers to the relative mobility rates that result from comparing the class of destination distributions of people from different social origins (Breen, Mood, and Jonsson 2016).

people's social background (Dean and Platt 2016). Similar to other Western economies, ascription has resisted, at the expense of meritocracy, to the rapid expansion of the middle class since the end of the Second World War (Therborn 2013).

Compared to the majority of the population, the intergenerational mobility patterns of immigrants have been less often studied, although there are notable exceptions such as Heath and Ridge (1983), Heath and McMahon (1999, 2005), Platt (2005c, 2007a), and Li and Heath (2015) among others. In the context of shifting structural patterns and constant mobility chances over time, there is still a need for further inquiring on how direct O (parents, first generation) – D (offspring, second generation) class transitions operate across ethnic-origin groups (Platt 2016).

As with class, a society could be also thought to be open or closed in terms of ethnicity (Platt 2005c). Irrespectively of whether a given society is closed in terms of class, if the observed patterns of class mobility are similar across ethnic-origin groups, class overrides ethnicity in explaining inequality. Thus, the within-group class stratification is similar between groups, including natives (Heath and Smith 2003; Platt 2006). Intergenerational class stability among ethnic-minority groups with respect to the majority is for instance a good indicator of societal openness with regard to ethnic diversity (Hout 1984). However, if the opposite is true, and the intergenerational transmission of privilege results more difficult for some groups than others, we encounter a situation of ethnic closure in which ethnicity 'trumps' class, and therefore the occupational experience of the members of a particular ethnic-origin group is similar regardless of their class origins (see *graph 3.1*) (Heath and McMahon 2005; Platt 2005a:34).

*Graph 3.1 Societal class and ethnic closeness/openness*




In this chapter I first discuss key migration-related methodological issues for the study of social mobility[29], and propose a strategy to take them into account in the research design and analyses. Based on these methodological considerations, but mainly on the existing theoretical knowledge in both ethnic stratification and mobility research, I formulate general hypotheses for the analyses. I comment next on differences in the class distributions at origin and destination across cohorts and for the different ethnic-origin groups studied. In the section that follows, I report absolute marginal intergenerational changes and mobility/retention rates, as well as inflow (recruitment into class of destination) and outflow (destination classes for same origins) percentages.

In the second part of the chapter, I look at differences in relative mobility patterns across ethnic-origin groups by fitting logit, multinomial logit, Poisson, and log-multiplicative models for men and women separately. Finally, I summarise and discuss the main findings relating them to the existing body of research, as well as to the other chapters of this thesis.

[29] With the use of the more general term 'social mobility' in the text I refer to both absolute and relative mobility. Otherwise I distinguish between the two.

*Preliminary methodological considerations*

The study of the social mobility patterns of the second generation presents extra challenges compared to the majority of the population. These are mostly due to data availability and suitability, measurement issues related to the transferability of class position across national borders, and decisions on how to treat missing cases —especially those that do not fit common class categories.

Studies on the social mobility of immigrants and their offspring at the aggregated level have taken three major approaches, each with its advantages and limitations. The first line of research uses comparable cross-sectional data and reports the overall mobility patterns of different ethnic-origin groups in two points in time by comparing aggregate changes in social class positions across them. This research strategy is likely to be influenced by the dynamic nature of migration by ultimately comparing non-comparable samples. Moreover, it does not account for the class transferability issue of the first generation, and does not trace either the intergenerational transmission of social class, as parent-child dyads are not possible to track down.

The correct identification of the true class position of the first generation is problematic due to the disruptive process of migration. I develop hypotheses in the next section on the correspondence between the pre-migration class/characteristics of the parents (migrants) and the social destination of their offspring (native-born immigrants), as the often 'unobserved' pre-migration social position of the parents might hinder the correct interpretation of mobility patterns across groups. Thus, as Platt (2005d) and Li and Heath (2015) argue, the apparent social mobility observed in host societies for different immigrant groups, might be covering an intergenerational process of class stability or reproduction across national boundaries and social systems.

The second approach in the literature deals with the main limitations of the former. In the first place, it considers the social class position of the actual parents. Moreover, by studying the direct intergenerational transmission of social class between the first and second generations, the class position of the parents refers to its post-migration one, addressing (although not fully) the class transferability problem associated with the first generation. In this type of research, questions about the class position of the parents are asked retrospectively, recalling their occupational status when the respondent was at school. This implies that the parents lived and interacted with the labour market in the country of destination for a significant period of time, i.e. at least since the day of birth of the UK born respondent. One limitation of

intergenerational studies however is that they are not able to account for the comparative experience of different ethnic groups during a common context and period. Thus, this design does not specifically address age, period, and cohort effects.

The third design, used for instance by Platt (2005c), deals with both issues, i.e. the intergenerational transmission of social class and the common experience (context and period) across groups, at the same time. The most important difference with respect to the other two designs is that it focuses on a particular cohort, for which the social class of the parents was measured at the same time for all the individuals in the sample when they were at school. Instead of a retrospective approach to parental class position, which might be subject to recall bias, the author uses a prospective one. One of the main advantages of this design is that it deals with the problem of confounding age and cohort effects, as it only focusses on a single cohort in a common contextual labour market for all groups. Often one of the main disadvantages of prospective designs is however sample attrition, as data collection depends on the selected sample that has survived until the last interview used. The extent to which this selection is accounted for often determines the validity of the findings.

On top of the problems related to item and case non-response, some authors argue that the extended practice in mobility research of considering only employed persons, often assuming full-time and regular employment, is misleading for the study of immigrants' social mobility (Heath and McMahon 1999b; Miller 1998; Platt 2005b, 2005c). Thus, if our interest lies mostly in between ethnic-group comparisons, rather than in social mobility *per se*, it seems rather more appropriate to use the complete information on the comprehensive labour market/force experience of each group, instead of treating part of this experience as missing. Ignoring the role of alternative destinations —i.e. the fact that some ethnic groups have on average a significantly higher risk of unemployment, or that women from specific origins are less likely to participate in the labour force—, when assessing differences in class transitions across groups poses therefore relevant implications for the analysis and interpretation of the findings[30].

One of these implications is that the final sample size is not maximized, especially in the case of class destinations. A second implication is that the goodness-of-fit of the models is likely to be negatively affected. Moreover, and most importantly, ignoring the existence of alternative destinations is also likely to affect the validity of the substantive findings, mainly by downplaying the immigrant/ethnic origin impact on destination outcomes (Miller 1998). As

[30] Although not for relative findings, which are insensitive to marginal distributions.

Model (1999) finds in her study using the 1991 census, while for the second generation we often observe occupational improvement, the same does not apply to unemployment for instance. In addition, as Platt (2005c) points out, non-class destinations are likely to vary by class of origin, reaffirming in this way their substantive interest in ethnic stratification research.

To account for these implications, and for the impact of ethnic-origin variation in unemployment and non-participation experiences on mobility, there are at least three possible strategies apart from the often used one of listwise deletion of the non-employed —which as already pointed out significantly reduces the number of observations for different ethnic-origin groups (Miller 1998).

One of these strategies defends the idea of including the unemployed into the unskilled workers' category. This practice hinders however the substantive interpretation of the results, as we are not able to differentiate between these two groups, for which mobility patterns might differ in many respects. Still, within the class-based approach, another strategy consists in assigning the status of the previously held occupation/class position (if any) to persons who report being unemployed at the time of measurement. A third approach proposes instead the creation of non-class categories to accommodate non-fitting observations in the class scheme (Heath and McMahon 1999; Platt 2005c), classifying those who are unemployed into a distinct 'social class' category. Apart from unemployment, and especially for the case of women, I argue that mobility analyses of immigrants should also consider labour-force participation (i.e. inactivity) as an extra category. The latter is also expected to differ significantly across groups, and therefore including the observations of non-participating women in our analyses, either as a separate category or together with unemployment —e.g. in a 'not-working' category— depending on its incidence, might reproduce in a more accurate way the 'true' experience of immigrant women in the class structure of the host society.

### 3.2 Theory and hypotheses

The hypotheses below revolve around the question of whether the OD association differs across ethnic-origin groups and migration status in the context of the migration process. If it does not differ, we could argue that class overrides ethnicity in explaining ethnic inequalities in intergenerational social mobility at the aggregated level. If the OD association instead differs, either ethnicity overrides class, or more privileged class origins are not enough to counter ethnic-related obstacles to class retention (e.g. discrimination in the labour market). Moreover

the OD association might differ further by gender within and between groups in each of these 'class *vs.* ethnicity' scenarios (Platt 2005a).

I first hypothesise how pre-migration characteristics, together with the experience of migration and settlement itself, might affect the social mobility patterns of the second generation by ethnic origin. A key issue is that even if the class position of the parents is measured post-migration in the host society, it is likely to differ from the pre-migration one (Platt 2006). With this in mind, I schematise different migration and non-migration-specific hypotheses on intergenerational mobility patterns in *graph 3.2*[31].

*Hypothesis 1* states that if a significant proportion of the first generation comes from higher skilled/educated origins, a process of *class reassertion or underlying class stability*, rather than upward mobility, is more likely to be the case for the second generation, if this overcomes the process of class downgrading often experienced by the first. As many authors argue, migration often weakens the link between origin and destination, with the first generation being more likely to experience downward mobility relative to the position they had in their origin country (Chiswick 1979; Chiswick, Lee, and Miller 2003; Heath and Smith 2003). This is mainly due to difficulties in the transferability of foreign human capital, skills, and the pre-migration labour market experience, lack of fluency with the language of the host society, lack of networks or social connections in the receiving society, and discrimination in the labour market (Friedberg 2000; Heath and Ridge 1983; Muñoz-Comet 2016; Platt 2005c). Therefore, while I hypothesise higher levels of net upward mobility for second generation immigrants compared to natives, I also argue that this class upgrading experience might be in some cases better understood as a process of apparent rather than 'true' upward mobility for some groups.

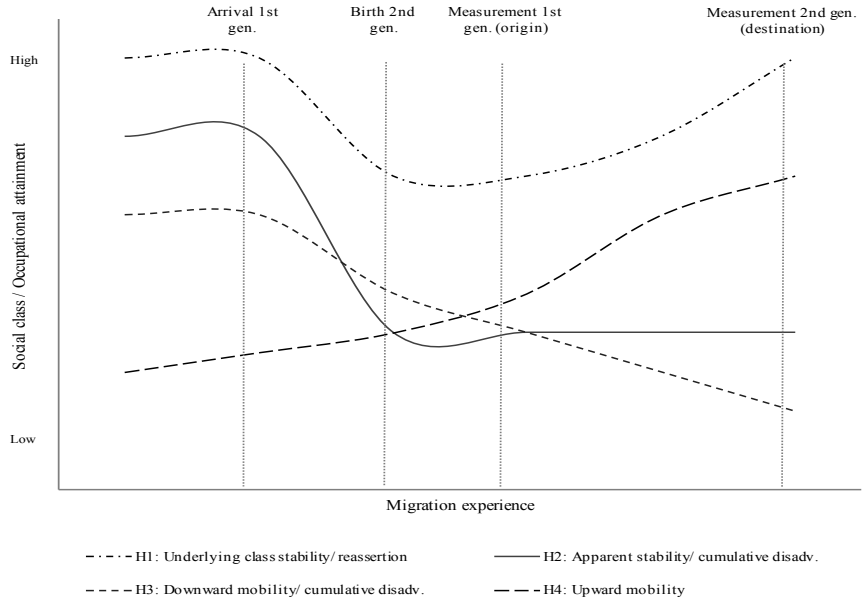
*Hypotheses 2* argues, on the other hand, that the class position of the second generation might also be directly affected by the labour market experience of the first in the host society (Heath and McMahon 2005). As some authors argue, the labour market experiences of first and second generation immigrants are often correlated. Groups that perform well in the first generation are therefore more likely to do so in the second, and vice versa (Papademetriou, Somerville, and Sumption 2010). This is even truer for the UK, a context in which there is a strong parent-son correlation in labour-market outcomes. Based on this, we might observe instead a process of *apparent/false class stability*, instead of downward mobility, for the second generation, as originally higher or moderately higher skilled/educated groups might not be able to transmit their pre-migration class advantage to the second generation in the host society. The

[31] Excluding for the moment hypotheses on class stability at all class levels.

latter is not able therefore to overcome the initial disadvantage encountered by the first generation, and retain in consequence the host society's class position of their parents remaining trapped in low-qualified jobs in the secondary sector of the labour market (Piore 1979; Reyneri and Fullin 2011). This results in an intergenerational process of cumulative disadvantage, which is ultimately masked as class stability in the results when pre-migration characteristics are not considered (Carmichael and Woods 2000; DiPrete and Eirich 2006; Platt and Phillips 2016:256).

Moreover, we could also hypothesise non migration-specific processes of downward (*hypothesis 3*) and upward (*hypothesis 4*) mobility within the context of the migration experience. These hypotheses, in contrast to H1 and H2 above, imply that the mobility experience of the second generation is less likely to be affected by the pre-migration characteristics and the experience of the first generation in the host society, and more by their own educational achievement and performance in the labour market, influenced by strong favourable expectations and aspirations in order to move throughout the social ladder of the host society —e.g. by means of an optimal use of network structures and/or bonding and bridging social capital for example (Massey 2007; Putnam 2000).

*Graph 3.2 Hypothesis on the social mobility patterns of second generation immigrants*



In terms of gender, comparative research on social mobility has concluded that it exerts a key mediating role in the OD association across countries (OECD/European Union 2015). Compared to men, women tend to be over-represented in the lower part of the occupational/class distribution (Hout and DiPrete 2006), although the latter are usually found to have lower levels of intergenerational stability, i.e. more fluidity or a lower impact of social origin on destination (Breen and Jonsson 2005; Heath and McMahon 2005). The overrepresentation of women in lower class positions becomes more evident when gender and migration status intersect, although there is significant ethnic-origin variation on this respect (Platt 2005c). We might hypothesise therefore gender differences in relative mobility to vary with ethnicity (*hypothesis 5*), due mainly to variation in the intersection between educational/class attainment and cultural beliefs —particular historical processes related the role of women in the family and society more generally— across but also within groups. In this respect, we must take into account significant ethnic-origin differences in the selection of women into the labour force, as women from particular ethnic-origin groups are more likely to be economically inactive, also in the second generation. I differentiate therefore the OD association by gender over ethnic minority categories (M) by estimating separate models for men and women respectively for each group. It is important to explain why gender differences in the nature of the OD association differ by ethnic origin, and the extent to which cultural or material aspects/mechanisms —or their interaction— are able to account for these differences[32].

In sum, I expect a higher net upward mobility rate for the second generation, as on average it has more disadvantaged class origins, and is likely to experience migration/ethnic-specific processes of class (re)adjustment (Heath and McMahon 1999; Heath and Smith 2003). I expect this readjustment process to vary however across groups depending mainly on the available 'room at the top' for each of them, and the extent to which there is a process of regression towards the mean in terms of ability and motivation in the second generation (Blackaby et al. 2002). Thus, absolute mobility depends on where individuals start from, in this case on the class distribution of the first generation (the parents). Therefore, if higher mobility is observed for particular groups this is likely to reflect their lower starting point of departure in the class structure of the host society. Not taking into account this ethnic-origin variation at origin would be misleading if the purpose is to assess the extent to which some groups 'succeed', and others do not, in the labour market and class structure of the host society (Heath and McMahon 2005). In this line, it is key to differentiate the immigrant from the ethnic

[32] This is assessed in detail in the following chapter.

experience in order not to attribute the former to the latter. Thus, the immigrant generation is constrained by non-ethnic obstacles that result from the process of migration —e.g. moving costs, devaluation of credentials, language, citizenship etc.— that no longer apply (at least directly) to the second generation.

In relative terms, I expect a weaker link between O and D at the aggregated level —i.e. more social fluidity— among the second generation compared to natives. I do not expect however the underlying OD association pattern to differ significantly across groups neither for men nor for women (Hout 2008). Thus, I do not expect ethnicity to 'trump' class background, and therefore I hypothesise members of different ethnic-minority groups (including natives) but coming from the same class background to compete in similar terms with a similar internal stratification structure (Heath and Smith 2003).

I argue however that when studying the OD association both in absolute and relative terms for different ethnic-origin groups we have to be aware of migration-specific processes of 'true' class reassertion (H1) and apparent class stability (H2) in the interpretation of the results. Therefore, the migration history of the family and the experience of the first generation in the labour market of the host society, together with the experience of the second generation itself in the context of a well-established fluid/rigid social order, and a presumably discriminatory labour market, are likely to affect social mobility.

## 3.3 Analytical strategy

*Data, sample, operationalization, and methods*

Using data from the first wave of the UKHLS panel study, I report and comment on mobility graphs and tables for natives and second generation immigrants[33] focusing on the transitions from their parents post-migration class position to their own. The basic idea behind intergenerational mobility tables is to assess both absolute and relative mobility between respondents' social origin and destination by cross-classifying these two variables[34]. Compared to multivariate models, mobility tables provide different and useful insights for theory testing, as they allow for the direct and detailed examination of movements in a particular stratification

[33] I consider individuals aged 25 to 64, as I assume that individuals aged 25 onwards are more likely to have finished education and already achieved occupational maturity (Bukodi et al. 2015; Cheng and Heath 1993), and therefore they are closer to what we could consider as their 'final occupational/class destination'.

[34] I use weights for the analyses of the survey data in order to account for the specific design of the study, and also for non-response. The use of weights also allows for inference to the population(s) of interest.

system. More specifically, mobility tables tell us where within the stratification system upward/downward mobility opportunities/constraints reside (Hout 1983). Mobility tables help in uncovering the nature of stratification processes, telling us how these evolve generationally, and how they compare across different sub-groups of interest in a given population of analysis.

There are many different ways of operationalizing social origin and destination. I opt in this case for a categorical measure as we might expect different processes of inclusion and exclusion to occur at different levels of the class structure for different groups (Heath and McMahon 1999:5). I use the hierarchical three-category version of the National Statistics Socio-economic Classification (NS-SeC) scale. This is based on the Erikson, Goldthorpe, and Portocarero (EGP) class scheme (1979), and is the main socio-economic classification in the UK. Its collapsed version distinguishes between: (1) Management and professional, (2) Intermediate, and (3) Semi-routine and routine class positions (see *table A3.1 in the appendix*). One of the main advantages of NS-SeC with respect to EGP is that it better accommodates gender differences in occupations and employment relations (Dean and Platt 2016)[35].

As discussed in the theoretical part, alongside the three NS-SeC class categories, I include long-term unemployment and inactivity as extra origin and destination categories at the descriptive level, and merge them into the category 'not working' for the analyses. I assign a long-term unemployment status to the cases in which the respondent has been unemployed or looking for a job for more than 12 months since his/her last job ended. For the cases in which the period of unemployment equals to 12 months or less, I assign the status of the previous occupation to define the current social class[36]. Inactivity refers instead only to unpaid care and domestic work, as I exclude other inactive profiles —i.e. people in full-time education, early retirement, or disabled/sick— from the sample, as they would distort the intergenerational class transmission process I study.

To assign class of origin I use a dominance approach by considering the highest value for co-resident parental couples. This practice acknowledges the limitations of the individual and male-centred approaches of assigning class position, and deals with both the fact that class is better understood as a property of the family/household rather than the individual (Beller 2009), and also that marriage/cohabitation might function as a means for upward social mobility (Miller 1998; Platt 2005c). Thus families, not individuals are the main units of stratification. To assign class of destination I use instead an individualistic class approach as I consider

[35] The NS-SeC three-category version does not differ however from the EGP class scheme.

[36] Information on the 'last occupation' is considered when the respondent is not in a situation of long-term unemployment, or he/she has missing information for the current occupation.

important to differentiate male and female related mobility processes across ethnic groups that would be otherwise hidden within the couple. I report the final analytical sample for the analyses in *table 3.1* where I differentiate between the sample with missing information, and the final sample with no missing information for neither origin nor destination classes. For both samples the proportion of cases for each ethnic origin group is very similar.

*Table 3.1 Number of observations with and without missing information on both class of origin and destination by ethnic-origin group*

| | All observations | | Observations with non-missing information on O/D class[(a)] | |
|---|---|---|---|---|
| Ethnic origin | Freq. | % | Freq. | % |
| UK | 16,802 | 84.02 | 14,370 | 85.06 |
| IRL | 808 | 4.04 | 670 | 3.97 |
| IND | 682 | 3.41 | 541 | 3.2 |
| PAK | 494 | 2.47 | 365 | 2.16 |
| BNG | 324 | 1.62 | 240 | 1.42 |
| AFR | 223 | 1.12 | 168 | 0.99 |
| JAM | 665 | 3.33 | 539 | 3.19 |
| Total | 19,998 | 100 | 16,893 | 100 |

Notes: (a) And also non-missing information on sex, age, cohort and education.
Source: *Understanding Society*, wave 1, author's analysis.

*Main contributions to the literature of migration and social stratification*

The main contributions of this chapter to the body of research on immigrants' social mobility are: (1) the inclusion of ethnic-origin groups in the analyses for which mobility patterns have been little studied (e.g. Bangladeshis and Africans); (2) the differentiation of the empirical analyses by gender within ethnic origin categories; (3) the operationalization of ethnicity in terms of country of origin rather than the often used self-reported ethnicity measure in order to increase reliability for comparisons across national contexts (OECD/European Union 2015); (4) the assessment of the direct class transition from parents to children instead of relying on comparable cross-sectional data on social class for the different groups at different time points (Platt 2005c:2); and (5) the analysis of the strength of the origin-destination association for each ethnic-origin group by means of group-specific odds-ratios and summarizing parameters — using for the latter different specifications of Log-Multiplicative Layer Effect Models (Erikson and Goldthorpe 1992; Xie 1992).

One potential drawback of this chapter relates to the fact that information on social origin is collected retrospectively in the data by asking individuals to report both the job status and the occupation of their parents when they were 14. This practice can potentially lead to a decrease in the level of validity of the social origin variable due to respondents' recall biases. Having said that, to collect information on social origin retrospectively is a widespread practice in survey design, and most of the time the only feasible solution. Moreover, as Hout (2008, 2015) defends, people tend to report information on their parents' educational and occupational positions with an acceptable level of reliability. Another shortcoming is the difficulty to differentiate between age, period and cohort effects as cohorts are pooled for the analyses, although the second generation concentrates in similar more recent cohorts across ethnic origins.

*Class distributions over time and across ethnic origins*

Class distributions in *table 3.2* below confirm that ethnic minorities in the sample start from noticeably different origins, with no significant intra-group variation by gender. On one hand, Africans present comparatively an 'advantageous' start with about half of the observations in managerial and professional positions. This contrasts with the origin distribution of the Bangladeshi and Pakistani second generation, whose parents mostly clustered instead around working class and unemployment/inactivity positions when respondents were aged 14. The latter is especially true for Bangladeshi, with almost half of the sample coming from non-working households. Jamaicans start mostly from working class origins, while Indians have a more polarized distribution. These initial differences determine the mobility patterns of the second generation, for which we observe a general tendency of convergence across groups at destination, although important differences remain between them, as well as within by gender.

At destination a relatively high percentage of inactivity among Pakistani and Bangladeshi women remains; while among men, Jamaican are the most disadvantaged with the highest long-term unemployment observed. At the top of the distribution, Irish and Indian men achieve comparatively high class positions at destination, distancing themselves from their female counterparts resulting in significant absolute gender gaps in attainment —especially for the case of Indians. Among Africans, women present instead a small positive difference with respect to their male counterpart at top class positions. The class distribution of second generation Africans at destination is however less clustered at the top than the one of the first

(origin) for both men and women, with a significant increase in intermediate positions as a consequence.

*Table 3.2 Origin-destination class distributions and dissimilarity indices for men and women by country of origin*

*Men*

| | UK | | IRL | | IND | | PAK | | BNG | | AFR | | JAM | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Class | O | D | O | D | O | D | O | D | O | D | O | D | O | D |
| Management & prof. | 32.1 | 41.7 | 30.9 | 51.1 | 30.7 | 50.4 | 11.9 | 31.6 | 8.6 | 29.7 | 50.7 | 44.9 | 24.8 | 31.8 |
| Intermediate | 25.0 | 21.0 | 27.9 | 21.6 | 12.5 | 25.7 | 20.3 | 26.6 | 9.4 | 26.6 | 15.9 | 26.1 | 19.2 | 18.7 |
| Semi-routine & routine | 38.4 | 30.5 | 37.5 | 21.6 | 46.8 | 20.7 | 40.1 | 32.8 | 35.2 | 28.9 | 21.7 | 17.4 | 45.3 | 28.0 |
| Not working | 4.5 | 6.7 | 3.6 | 5.7 | 10.0 | 3.2 | 27.7 | 9.0 | 46.9 | 14.9 | 11.6 | 11.6 | 10.8 | 21.5 |
| DI (a) | 0.17 | | 0.23 | | 0.24 | | 0.17 | | 0.17 | | 0.21 | | 0.21 | |

*Women*

| | UK | | IRL | | IND | | PAK | | BNG | | AFR | | JAM | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Class | O | D | O | D | O | D | O | D | O | D | O | D | O | D |
| Management & prof. | 31.6 | 34.6 | 27.8 | 39.9 | 31.3 | 33.3 | 14.8 | 17.6 | 3.7 | 18.3 | 55.3 | 46.5 | 22.0 | 37.5 |
| Intermediate | 25.8 | 21.7 | 23.3 | 19.5 | 14.6 | 23.4 | 19.1 | 14.1 | 14.0 | 11.6 | 14.9 | 17.5 | 23.1 | 21.2 |
| Semi-routine & routine | 37.5 | 26.9 | 40.6 | 22.6 | 41.8 | 19.3 | 34.8 | 12.9 | 26.8 | 14.0 | 21.9 | 14.9 | 45.7 | 19.6 |
| Not working | 5.1 | 16.9 | 8.3 | 18.1 | 12.3 | 24.0 | 31.3 | 55.5 | 55.5 | 56.1 | 7.9 | 21.1 | 9.2 | 21.7 |
| DI | 0.14 | | 0.20 | | 0.18 | | 0.25 | | 0.25 | | 0.22 | | 0.19 | |

Note: (a) The Index of Dissimilarity (DI) between origin and destination class distributions ranges from 0 (total similarity) to 1 (total dissimilarity).
Source: *Understanding Society*, wave 1, author's analysis.

One of the main explanations for the convergent trend of the second generation is educational attainment, which in the sample is on average higher compared to natives[37]. Among men, all groups except Bangladeshi and Jamaican are more likely to have a degree than natives; and among women, the only exceptions are Bangladeshi and Pakistani. Within groups, educational differences between sexes are significant, with men being usually higher educated than women, except in the Jamaican case, in which the opposite is true. The effect of origin on education (OE), and the effect of the latter on occupational/class attainment (ED) will be however formally tested in more detail in chapter 5. I report educational variation over cohorts and ethnic-origin groups here to better understand the observed mobility patterns.

A commonly used measure to summarise differences in class distributions across groups is the Dissimilarity Index (DI). The latter indicates the proportional amount that should change in one distribution in order to be equal to the one we are comparing it to, and vice versa. The last row of *Table 3.2* reports DIs for aggregated data (Cox 1999) between O and D classes for men and women separately to describe the extent to which the two distributions resemble each other by ethnic origin. Among men, Indian present the largest OD dissimilarity, followed by Irish, African, and Jamaican respectively. Contrarily, the smallest dissimilarity is for native, Pakistani, and Bangladeshi, with DIs seven percentage points smaller than for instance the Indian one (24%). Among women, the largest dissimilarity is instead for Pakistani and Bangladeshi, and the smallest for native. Indian men on one hand, and Pakistani and Bangladeshi women on the other, are those for which the proportion of persons that would have to change their class position at either origin or destination for the two distributions to be the same is the highest.

I also compare in *table 3.3* each group's O and D distributions to those of natives in order to summarise and quantify group-specific deviances. Duncan's DIs in *table 3.3* are useful in this case for providing an overall idea of whether origin class differences with respect to natives shrink at destination as hypothesized. DIs confirm indeed the convergent trend for the second generation towards the class distribution of natives, as dissimilarity indices are substantively smaller at destination than at origin for both men and women across groups. Among men, this convergent trend is especially true for Bangladeshi, Pakistani, and African; while among women, it is more evident for Bangladeshi and African. There are however exceptions to convergence. One is Irish men, who start from a similar origin than British, but attain significantly higher class positions. The other is Pakistani women, who seem to increase

[37] Descriptive statistics are reported in *table A3.2* in the appendix.

at destination their disadvantage at origin with respect to natives. One of the explanations to this could be that at origin I use a dominant approach to assign class, while at destination I use an individual one.

*Table 3.3 Indices of Dissimilarity (DI) for origin and destination social class distributions of different ethnic-origin groups compared to natives*

| | *Men* | | *Women* | |
|---|---|---|---|---|
| Ethnic origin | DI Origin | DI Destination | DI Origin | DI Destination |
| UK vs. IRL | 0.04 | 0.11 | 0.05 | 0.06 |
| UK vs. IND | 0.13 | 0.12 | 0.10 | 0.07 |
| UK vs. PAK | 0.23 | 0.06 | 0.26 | 0.34 |
| UK vs. BNG | 0.41 | 0.18 | 0.41 | 0.28 |
| UK vs. AFR | 0.27 | 0.10 | 0.27 | 0.15 |
| UK vs. JAM | 0.15 | 0.11 | 0.12 | 0.10 |

Note: The Duncan Index of Dissimilarity ranges from 0 (total similarity) to 1 (total dissimilarity).
Source: *Understanding Society*, wave 1, author's analysis.

As the last row of *table A3.1* in the appendix shows, ethnic-minority groups differ in terms of age. For all groups, except Irish, and to a lesser extent Jamaican and Indian, the average age of the second generation is significantly lower compared to that of natives. For instance, the mean age difference between the younger groups in the sample —i.e. Bangladeshis, Pakistanis and Africans— and natives is about ten years for both men and women. This is important to keep in mind when interpreting the results, as for the younger groups a higher proportion of people might be less likely to have reached a situation of class maturity at the time of the interview in comparison to other groups —even if we restrict the sample to people aged 25 to 64.

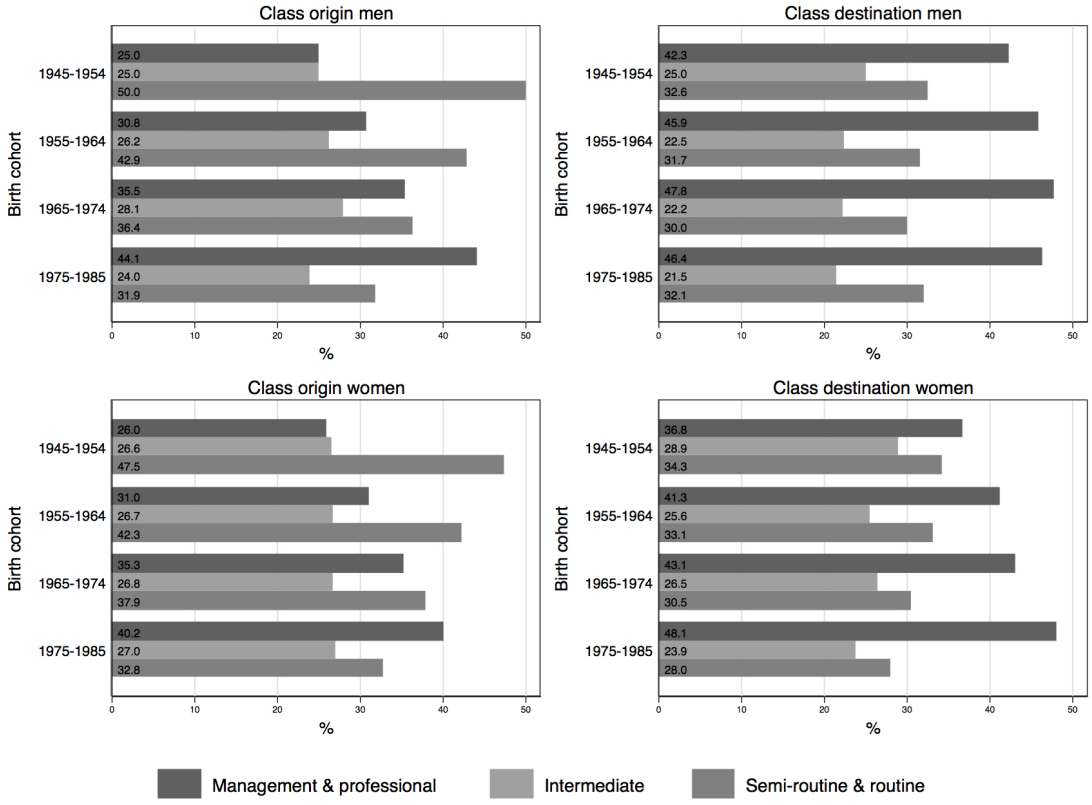
It is important to keep in mind that immigrant generations are not equivalent to birth cohorts, although this is sometimes intrinsically assumed. There is significant birth cohort heterogeneity within the second generation, which at the same time differs across groups. In the sample, second generation immigrants tend to concentrate in younger cohorts of birth compared to the more spread distribution of natives in this regard. This is relevant as each birth cohort experience different specific labour market conditions, which are often determined by changes in more general socio-economic and political processes.

The observed birth cohort variation of the second generation in *table A3.2* clearly reflects the different time of arrival of the first generation to the UK. We can infer for instance

that Irish and Jamaican immigrants arrived the earliest, as about two-thirds of their offspring, male and female, cluster in the 1955-64 and 1965-74 birth cohorts. These two groups are followed by Indians, with about 75% of their second generation born between 1965 and 1985. Pakistani, African and Bangladeshi immigrants follow in this order. For the former two groups, more than half of their respective second generation belongs to the youngest cohort (i.e. 1975-85). For Bangladeshi this is even more evident as almost 60% of men, and about 3 out of 4 women, belong to this same cohort. When interpreting and comparing mobility patterns for the different groups in the sample we must keep in mind this birth-cohort variation, as important processes of change in the class structure alongside a process of educational expansion have progressively unfolded over these cohorts as shown in *graphs 3.3* and *3.4* below.

In *graph 3.3* I report the overall differences in class of origin and destination distributions over the four cohorts of birth in the sample by gender in order to provide a reference for the interpretation of the results, as in the absolute and relative mobility analyses cohorts are pooled due to limitations in the number of cases for some ethnic-minority groups. The graph clearly shows, on one hand, a decrease over cohorts of the working class origin in favour of the salariat for both men and women in the UK; and on the other hand, a predominance of the salariat position at destination, due mainly to the substantive increase of this class category at origin. Salariat positions at destination experience a moderate increase over birth cohorts, although it seems to shrink for the youngest one in the case of men, although this is not true for women.

*Graph 3.3 Origin and destination class distributions over birth cohorts by gender for the whole sample*

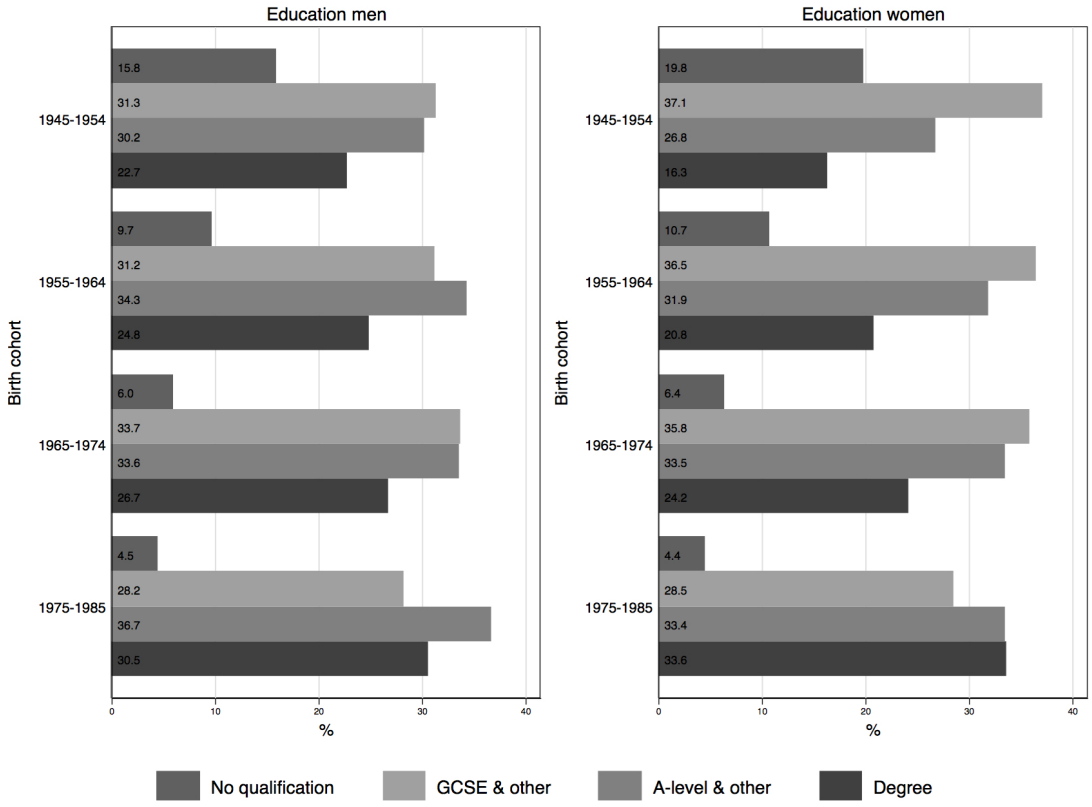



Source: *Understanding Society*, wave 1, author's analysis.

As it is well-known in mobility research, education mediates and moderates the OD association, by ultimately exerting an equalizing or compensatory effect between the two (Bernardi and Ballarino 2016; Breen and Jonsson 2005; Torche 2011). In the UK, as in all Western societies, the change in the class structure over cohorts has been accompanied by a process of educational expansion which has mostly benefited women (Blossfeld et al. 2015). *Graph 3.4* shows the magnitude of this process in the UK for men and women separately. We can observe, as expected, that changes in educational attainment across birth cohorts between 1945 and 1985 are substantial. On one hand, there is a decreasing proportion of people with no formal qualifications (5 times lower in the case of women), and a significant reduction in the proportion of women with secondary education in the youngest cohort. On the other hand, the graph shows a substantial increase in the proportion of degree-level education especially in the case of women —resulting in double the shares among the youngest cohort compared to the oldest. This is also the case for men, although to a lesser extent. The overall pattern in the graph

reflects a general process of educational expansion, within which we can also observe how the disadvantaged position in educational attainment of the oldest cohort of women (i.e. 1945-1954) in comparison to men is reversed for the youngest one (i.e. 1975-85), with a higher percentage of women than men attaining university education.

*Graph 3.4 Educational attainment distributions over birth cohorts by gender for the whole sample*




Source: *Understanding Society*, wave 1, author's analysis.

## 3.4 Absolute mobility patterns: intergenerational class retention and transitions

The most basic evidence mobility tables provide is cell counts for each combination of origin and current occupational or class categories. From cell counts we can first derive marginal distributions and absolute mobility rates for different sub-groups of interest in the population. While total mobility rates (TMR) relate the number of off-diagonal cases to the total number of observations, downward and upward mobility rates (DMR and UMR) only relate the upper or lower off-diagonal cases to the total respectively. While researchers and policy makers tend to

pay more attention to people's upward moves (Bukodi et al. 2015), the decomposition of the TMR into its upward and downward components is particularly relevant in revealing the dynamics of structural social mobility between first and second generation immigrants from different ethnic origins.

A priori, by looking at the marginal distributions in each mobility sub-table in tables *A3.3* and *A3.4* in the appendix[38], I expect an overall intergenerational occupational upgrading for both natives and the second generation. For men, this holds true in the data for almost all groups. It is however clearer for those groups that start from a more disadvantaged class position in the first generation, namely Pakistani, Bangladeshi and Indian. African men are the exception to this upgrading trend. Their class distribution shrinks instead at the top and widens at the bottom over generations, while it nonetheless expands in intermediate positions. At first sight, and in absolute terms, second generation African men seem therefore to encounter difficulties in preserving the initial advantage experienced by their parents in the host society. On the other hand, the occupational upgrading pattern over generations also holds true for women, although this is less pronounced. For the female offspring, a high number of observations in the 'not-working' category remain, especially for Bangladeshi and Pakistani[39]. African women are, as their male counterparts, the only exception, by showing a less favourable distribution at destination.

Even though there is a similar structural upgrading pattern across groups, most of the original compositional differences persist at destination due to the interplay between the different intensity of the upgrading/downgrading experiences, and the ethnic-group variation in origin distributions. Thus, despite the intergenerational downgrading trend of African men and women, second generation Africans still preserve their comparative advantage over other groups in terms of composition. This is however truer for African women than for African men, as the latter are surpassed in the salariat category by Irish and Indian men at destination.

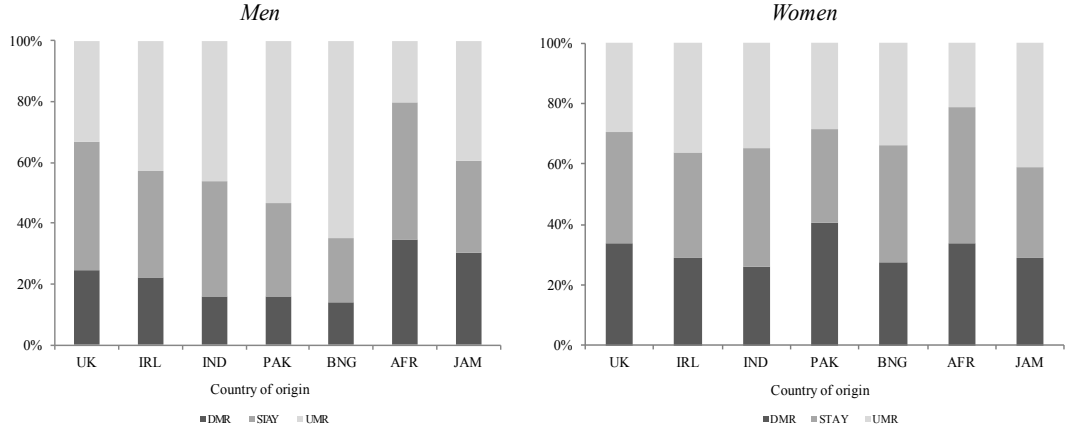
As hypothesized, and also in relation to the observed upgrading class structure over generations, *graph 3.5* confirms the initial expectation that the second generation is structurally more highly mobile than natives, and consequently less likely to reproduce their class of origin position at destination. More concretely, second generation immigrants are on average more upwardly mobile, and men more so than women. The latter are on the contrary more

[38] It is important to point out that while the marginal distribution across columns (i.e. the destination distribution) refers to a particular year (2009-11), the distribution across the rows does not refer to the class structure at any particular point in time as it has been discussed in the previous section of this chapter.

[39] The even more disadvantaged position of women in these two groups in this respect is mainly due to the fact that while origin class is measured at the household level, destination class is measured at the individual level.

downwardly mobile across groups. Ethnic-origin variation is however high, with significant exceptions to these overall patterns. African men and women are for instance less mobile than natives. They experience the highest immobility rate across groups, combined with a comparatively high downward mobility. For the rest of the groups, and among women, Pakistani are the most downwardly mobile, and Bangladeshi double the DMR of their male counterparts, being also half as upwardly mobile. On the other end, Jamaican women experience the highest UMR, which is also slightly higher than that of Jamaican men. Pakistani and Bangladeshi men are, on the contrary, the most upwardly mobile with difference. Their disadvantaged origin distributions allow for more room at the top in the second generation. On the other extreme, Jamaican men present the second highest DMR after African.

*Graph 3.5 Summary of absolute mobility patterns over ethnic origin by gender*




Source: *Understanding Society*, wave 1, author's analysis.

*Inflow and outflow rates*

Mobility tables offer the possibility of describing recruitment patterns into classes of destination, also known as inflow rates (see graphs *3.6* and *3.7*). These refer more concretely to the inflow of persons from different origins into a given class at destination (i.e. column percentages). I first look at the weight low social origins have at the top of the occupational distribution at destination (i.e. represented at the bottom left corner of *table 3.4*). Among men, Bangladeshi and Pakistani are the groups with a higher share of observations from low social origins at high destinations. For these two groups, men from routine or semi-routine and non-working household origins make up about two thirds of the salariat at destination, as the latter

is almost inexistent in the parental or first generation. At the opposite extreme Africans and natives stand out with less than one third of those at a salariat destination coming from low origin positions. Among women, Bangladeshi and Pakistani upper classes are also those that recruit the most from working class origins, with about 60% of observations at the top coming from either a working class or a non-employed household at origin. Jamaican women follow with 50% of the cases. As in the case of men, Africans are the group for which the salariat recruits the least from low social origins, for whom this is only true in 1 out of 5 cases.

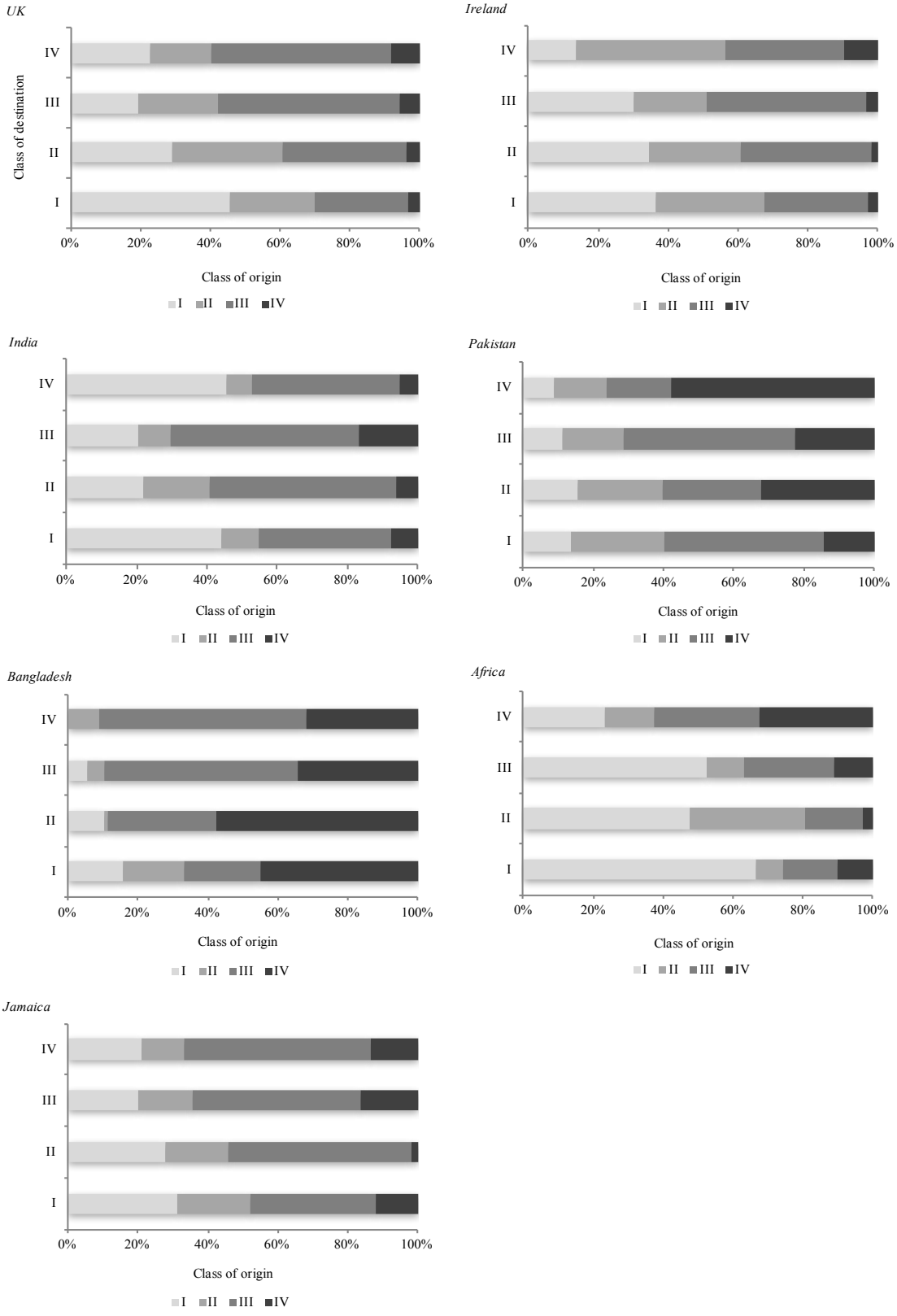
*Table 3.4 Outline inflow mobility table*

| | Destination class | | |
|---|---|---|---|
| Origin class: | Management & professional | Intermediate | Semi-routine & routine |
| Management & prof. | Class retention/ expansion at the top | | |
| Intermediate | | | |
| Semi-routine & routine | Low among high | | Class retention/ expansion at the bottom |

Inflow rates also provide information on whether there is a situation of class retention or expansion at the top. This basically entails that high occupational positions are mostly composed by either observations from a high social origin or from lower origins respectively. Class retention is comparatively very high for African men, as two thirds of the salariat is recruited from the same origin position. Native and Indian men, with about 45% of the observations, and Irish, with about 40%, follow. On the contrary, the groups with the lowest retention are Pakistani, Jamaican, and Bangladeshi, as they also have more available room to fill. For women, the intergenerational recruitment pattern at the top across groups is similar than the one for men. On the other hand, it is also informative to assess the extent to which there is retention at the lowest part of the distribution, usually higher than at the top. Retention at the bottom is indeed higher than at the top for almost all groups, and for both men and women. African are again the exception. Among Africans, women experience however a higher

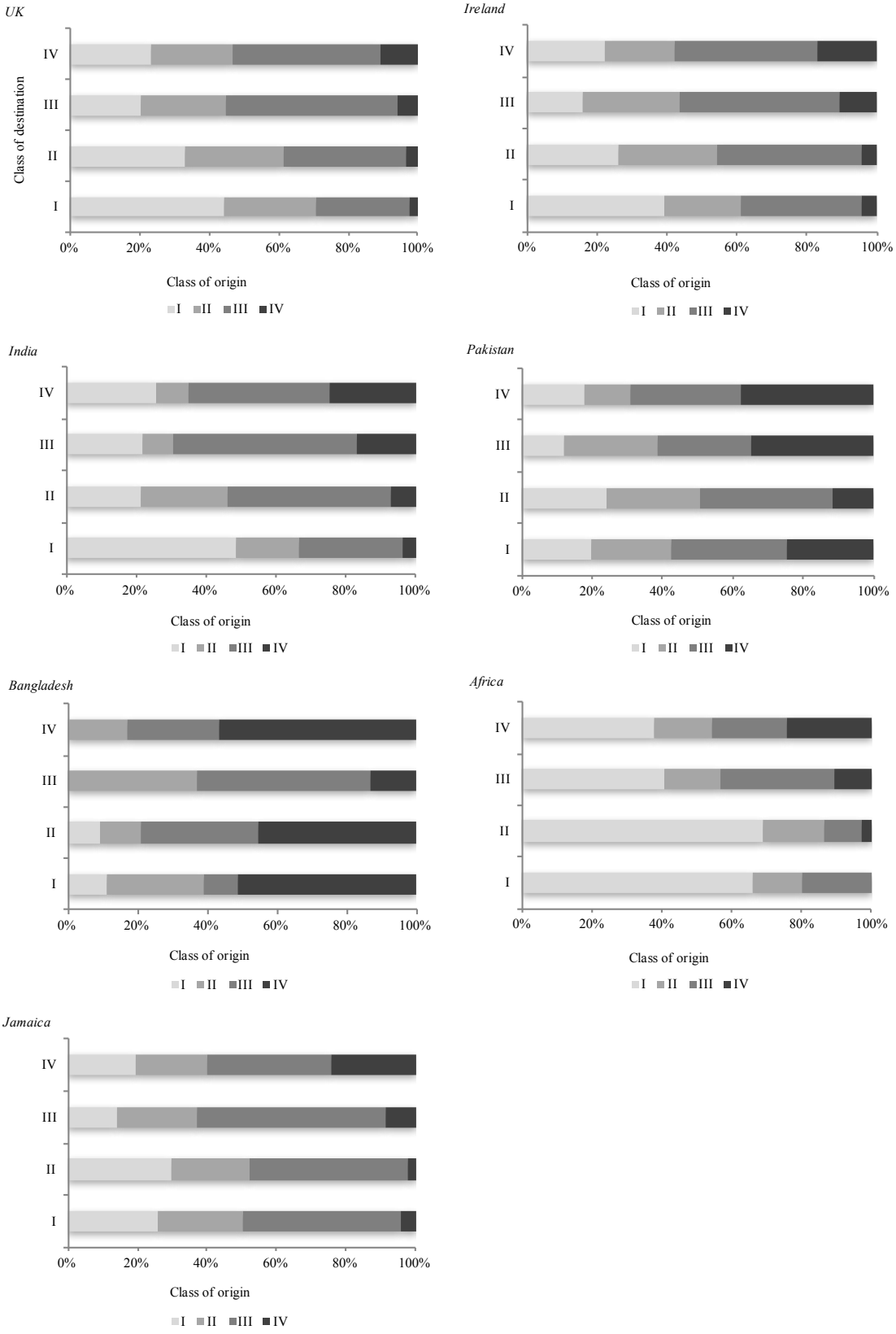
retention at the bottom than their male counterparts, being nevertheless still the group with the lowest one among women.

*Graph 3.6 Inflow rates by ethnic origin, men*




Source: *Understanding Society*, wave 1, author's analysis.

*Graph 3.7 Inflow rates by ethnic origin, women*




Source: *Understanding Society*, wave 1, author's analysis.

Outflow rates complement inflow information by describing the outflow pattern from each specific social origin into different destination classes (row percentages). They build on the average mobility and stability rates reported above by means of conditioning them on social origin. The low-left and top-right corners in each sub-table in *tables A3.8 and A3.9* in the appendix, also plotted in *graph 3.8* below, are the main points of referral to assess downward and upward mobility for high and low origins respectively across ethnic groups (see *table 3.5*).

*Table 3.5 Outline outflow mobility table*

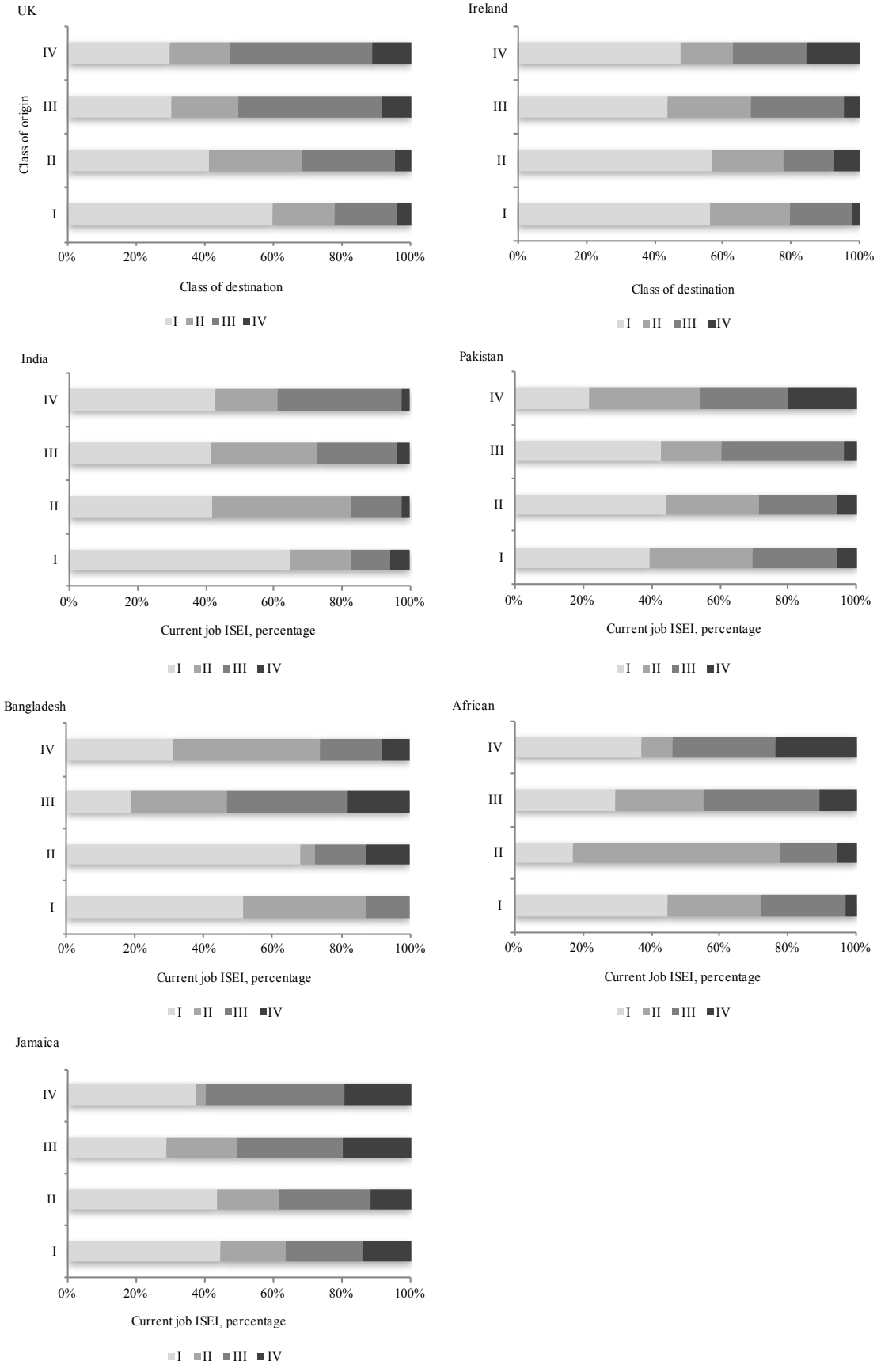
| | Destination class | | |
|---|---|---|---|
| Origin class: | Management & professional | Intermediate | Semi-routine & routine |
| Management & professional | | Downward mobility | |
| Intermediate | | | |
| Semi-routine & routine | Upward mobility | | |

Overall, outflow trends are homogeneous across the second generation and natives, although they differ in intensity between sexes and ethnic origins. In absolute terms there is more upward than downward mobility. Women experience however less downward mobility than men, with the only exceptions of native and Indian, for whom no significant differences are found in comparison to men. Among men, Irish exhibit the highest intergenerational upward mobility —i.e. from working class to salariat positions—, and are followed by Pakistani and Indian. Indian and Irish men exhibit the highest positive differentials between upward and downward absolute mobility —+29 and +25 pp respectively. Downward mobility is comparatively high for African, Pakistani and Jamaican origins respectively with about 1 in 4 men from the salariat ending up in routine and semi-routine class positions. African and Jamaican men present the lowest differentials between upward and downward mobility, about five times smaller than those of Indian and Irish.

Jamaican and African women follow the opposite pattern of their male counterparts, and present the largest upward-downward mobility differentials (i.e. +29 pp). This is explained mainly by the fact that women from these two groups are the most upwardly mobile in absolute terms. They are not however the least downwardly mobile, as these are Bangladeshi. The most

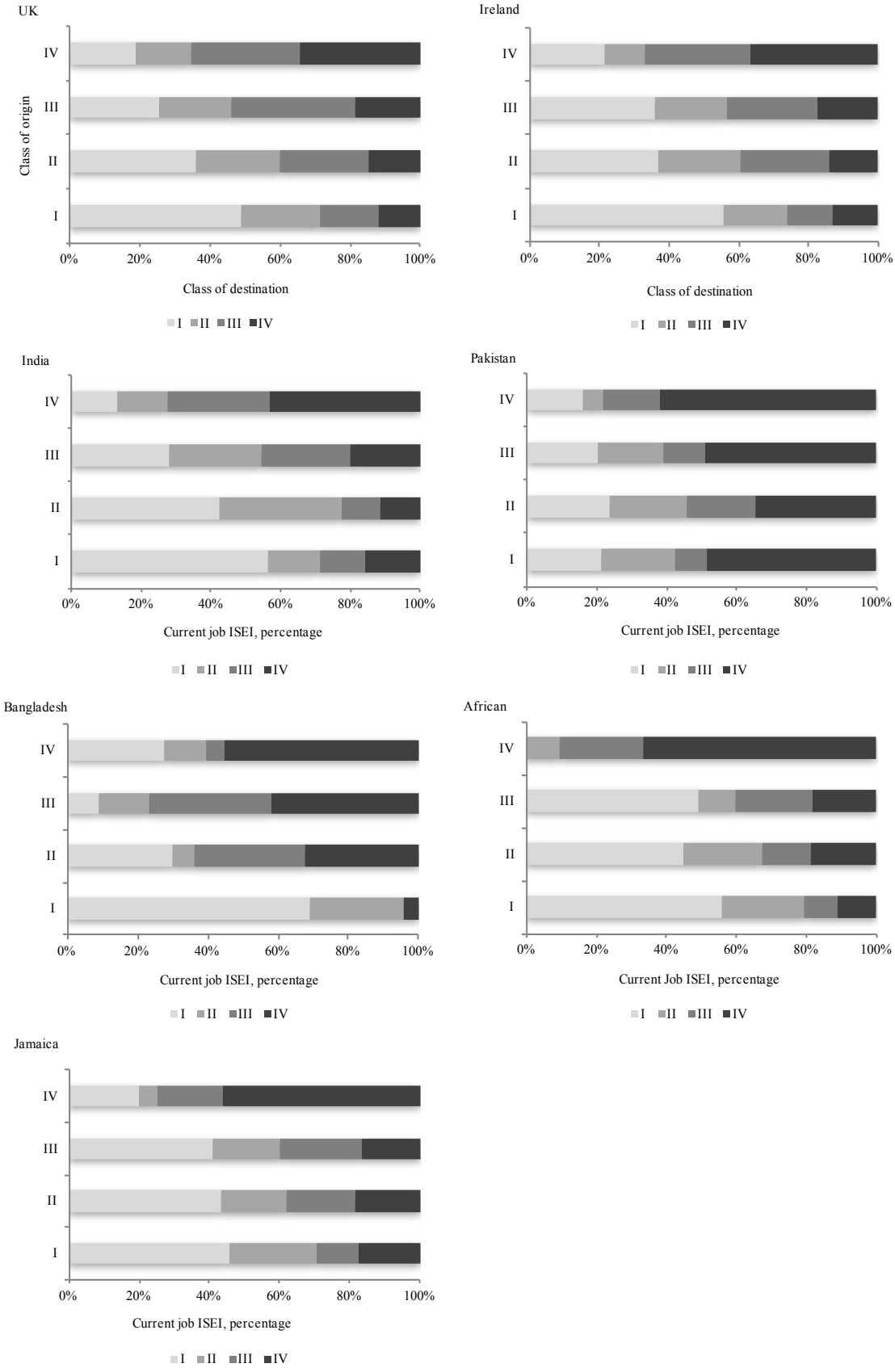
downwardly mobile, if we consider salariat to working class transitions, are instead native women. If we however refer to transitions from the salariat to non-employment, the most downwardly mobile, by a substantial difference with respect to the rest of the groups, are Pakistani women.

*Graph 3.8 Outflow rates by ethnic origin, men*




Source: *Understanding Society*, wave 1, author's analysis.

*Graph 3.9 Outflow rates by ethnic origin, women*




Source: *Understanding Society*, wave 1, author's analysis.

In sum, I have depicted the intergenerational pattern of change in the class/occupational structure for each ethnic-origin group in the host society differentiating the analyses by gender. I have first described how different groups depart from substantively diverse social origins, and noted that this variation, although reducing significantly, persists in the second generation. Nevertheless, I have argued that each ethnic group absolute mobility pattern ultimately reflects an adjustment towards the mean, or the class distribution of natives, at destination.

More concretely, I have observed an intergenerational upgrading of the class structure, especially for those groups that have a more disadvantaged distribution at origin and therefore more available room at the top at destination. In the context of this upgrading pattern, second generation immigrants are on average more mobile than natives in absolute terms. More concretely they are more upwardly mobile, and men more so than women. African men and women are however the exception, with the highest class retention and downward mobility rates across groups. Again, this is mostly explained by their advantageous distribution at origin compared to the rest of the groups including natives. Moreover, and despite the observed upgrading pattern, a large share of Pakistani and Bangladeshi women remain 'non-employed' in the second generation.

Inflow and outflow rates have contributed to the understanding of absolute mobility patterns across groups. Recruitment or inflow rates have shown that Bangladeshi and Pakistani higher classes recruit the highest share of persons from a low social origin, while African the lowest. I have also observed that for all groups, with again the exception of Africans, class retention at the bottom is higher than at the top. Outflow rates have shown a fairly homogeneous pattern for both the second generation and natives. Both men and women are more upwardly than downwardly mobile, and women are less downwardly mobile than men. Within groups we have seen opposite outflow mobility patterns by gender. Thus, while among men, Irish, Pakistani, and Indian are the most upwardly mobile, for women from the same groups the opposite is true. On the contrary, while African, Pakistani, and Jamaican men are the most downwardly mobile, women from these same origins are the least downwardly mobile. I have not yet assessed however group-specific differences in the relative chances of attaining particular class positions for individuals from different social backgrounds. To this end, the study of relative mobility allow us to get rid of compositional differences in the marginal distributions.

## 3.5 Relative mobility patterns

Compared to structural mobility, the study of relative mobility uncovers the underlying mechanisms operating in order to allocate people from different origins to different destinations by preserving or blocking the patterns of intergenerational transmission of advantage (Torche 2013:9). To this end, we need to get rid of structural influences, and pay attention instead to net differences or relative chances within each group (Bukodi et al. 2015). Alongside the structural pattern of change observed in the previous section, I test whether members of different ethnic-origin groups are equally likely to benefit from the situation of increased opportunity at the top across generations indistinctively of their social origin; or, on the contrary, whether people coming from high social origins are more prone than others to do so, and by how much. To differentiate between absolute and relative mobility is a well-established practice, as evidence have shown that high absolute mobility rates can coexist with moderate to high levels of inequality of opportunity in a particular society. Ultimately, by estimating relative mobility models, I am interested to see whether there is a weaker OD association among the second generation (differentiating by ethnic origin) compared to natives. Moreover, if this is the case, I aim at assessing to which extent higher fluidity reflects a process of perverse openness in which ethnicity trumps class and ethnic origin minorities experience a similar level of disadvantage irrespective of their parental class (Li and Heath 2016).

*Relative odds ratios*

Odds-ratios are the basic measure of fluidity, as they are invariant to sample size and marginal distributions (Breen 2004). The higher the odds ratios are, the higher inequality of opportunity is and vice versa[40]. There are two complementary ways of looking at odds-ratios in the framework of this research. The first one consists in comparing the odds for different occupational categories within a particular ethnic group, and the second in choosing one occupational category —or the difference between this category and an alternative one— and compare it across different groups. I focus, for the purposes of this chapter, on the second approach.

To assess the level of (in)equality of opportunity, I report in *table 3.6* both odds ratios (rows 1 and 3) and symmetrical odds ratios (row 2) for each ethnic-origin group, and for men

[40] An odds-ratio of 1 is equivalent therefore to perfect mobility.

and women separately in the two sub-tables. While odds ratios refer to the odds of ending up in a particular class at all, symmetric odds ratios depict the odds of ending up in a particular class relative to an alternative one (Platt 2005c:453). The closer the odds ratio is to1, the weaker is class reproduction (and the greater is fluidity or openness). I also provide confidence intervals for each estimate in square brackets. The size of the confidence intervals for second generation immigrants —especially in the case of Bangladeshi men, and to a lesser extent African men and women— warns us that we should be cautious in over-interpreting differences between groups or between sexes within them. Except in the case of natives, Irish and Indian, CIs often include the value of 1. For most ethnic origins, the number of people in the managerial and professional class at origin are fairly small, resulting in unstable estimates. For other groups such as Africans, it is the other way around.

In the table we can identify two overarching patterns related to sex and migration status: (a) inequality of opportunity is higher for natives than for second generation immigrants, (b) and for men compared to women in the case of natives, while the opposite is true for the immigrant offspring. There are however group-specific exceptions to these more general patterns. Thus, some groups are more unequal than natives in relative terms —mainly at low class positions, but not only—, and native women are less equal than their male counterparts at the bottom of the class distribution. Below I describe and discuss these findings in more detail.

Results show that natives (or people without a migration background) are one of the least meritocratic groups. For natives, the odds of ending up in the professional and managerial class for those from the same social origin, compared to those with their origins in the semi-routine and routine class, are higher for men (i.e. 3.3:1) than for women (i.e. 2.8:1). However, on the other extreme, the odds of ending up in the semi-routine and routine class if one also comes from a low origin over a professional and managerial one reverse, being 2.5:1 for women and 1.8:1 for men. In relative terms, natives are therefore more immobile at the top than at the bottom. Compared to men though, native women are more immobile at the bottom and less at the top.

The degree of relative immobility observed for natives does not translate across different ethnic-origin groups, certainly not at the upper part of the class structure. Thus, the relative advantage associated with coming from a salariat origin over a working class one for a salariat destination is smaller for all ethnic groups compared to natives, with the only exception of Indian women. Moreover, for Pakistani men, odds ratios slightly below 1 indicate that a salariat origin, in comparison to a working class one, does not make much of a difference in the end for attaining a salariat position. At the other extreme of the distribution, relative immobility

at the bottom is also smaller for second generation immigrants, although the relative disadvantage of coming from a working-class origin over a salariat one for a working-class destination is significantly higher with respect to natives in the cases of Indian and Bangladeshi men[41], and also Irish women.

Symmetrical odds ratios[42] indicate, as expected, that inequality of opportunity between high and low origins increases for all groups, including natives, when a salariat and a working-class destination are specifically compared —although it also increases the imprecision of the estimates, as their respective confidence intervals indicate. Thus, the odds of ending up in the salariat rather than the working class if you are from a salariat origin over a working class one are 4.5 times higher for native men, and about 4 times higher for native women. Contrarily, for Jamaican men and women odds ratios are about 1.5:1, and for Pakistani men even lower. Again, Indian men and women present the highest rigidity after natives.

*Table 3.6 Odds and symmetric odds ratios(a) of ending up in a particular class of destination comparing origins by ethnic group*

| **Men** | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Destination class | Origin class | UK | IRL | IND | PAK | BNG | AFR | JAM |
| Professional and managerial | Prof. and managerial vs. Semi-routine and routine | 3.3 | 1.5 | 2.6 | 0.9 | 1.3 | 1.4 | 1.4 |
| | | [3.0,3.8] | [0.9,2.6] | [1.5,4.5] | [0.3,2.6] | [0.3,5.7] | [0.4,4.6] | [0.7,2.9] |
| Prof. and managerial rather than Semi-routine and routine | Prof. and managerial vs. Semi-routine and routine | 4.5 | 1.7 | 3.0 | 1.3 | 2.5 | 1.6 | 1.5 |
| | | [3.9,5.2] | [0.9,3.4] | [1.4,6.5] | [0.4,4.3] | [0.4,17.9] | [0.3,8.7] | [0.6,3.8] |
| Semi-routine and routine | Semi-routine and routine vs. Prof. and managerial | 1.8 | 1.5 | 2.3 | 1.5 | 2.8 | 1.5 | 1.3 |
| | | [1.5,2.0] | [0.8,2.9] | [1.1,4.8] | [0.5,4.4] | [0.5,14.7] | [0.3,7.3] | [0.6,2.8] |
| **Women** | | | | | | | | |
| Destination class | Origin class | UK | IRL | IND | PAK | BNG* | AFR | JAM |
| Professional and managerial | Prof. and managerial vs. Semi-routine and routine | 2.8 | 2.3 | 3.3 | 1.3 | — | 1.6 | 1.0 |
| | | [2.5,3.1] | [1.4,3.8] | [1.9,5.6] | [0.5,3.4] | | [0.6,4.0] | [0.6,1.8] |
| Prof. and managerial rather than Semi-routine and routine | Prof. and managerial vs. Semi-routine and routine | 3.8 | 3.7 | 3.9 | 1.8 | — | 2.3 | 1.6 |
| | | [3.3,4.4] | [1.8,7.5] | [1.8,8.2] | [0.4,8.4] | | [0.6,8.6] | [0.7,3.6] |

[41] The estimate for Bangladeshi men is highly unreliable as its wide confidence intervals in square brackets in the table indicate.

[42] They are reported in the second row of each sub-table.

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Semi-routine and routine | Semi-routine and routine vs. Prof. and managerial | 2.5 [2.2,2.9] | 2.8 [1.4,5.5] | 2.2 [1.1,4.2] | 1.5 [0.3,5.7] | — | 2.0 [0.6,7.0] | 1.8 [0.9,3.7] |

Notes: 95% confidence intervals in square brackets.
*Due to the small number of observations for Bangladeshi women at the top of the distribution I cannot report odd-ratios for this group.
Source: *Understanding Society*, wave 1, author's analysis.

The OD association is therefore more rigid for natives than for the rest of the groups, which are more socially fluid, and have an 'easier' access to higher social positions. These findings are similar to those obtained by Platt (2005a), although they should be treated with caution, as she also alerts. First of all, because of the reference category (i.e. natives) we usually compare the social stratification patterns of different ethnic-origin groups to. Thus, there is a strong class association among natives in relative terms, which has been forged over generations and consolidated over centuries. Second, the weaker association observed among different origin groups could also be due to aspects such as the higher-class variation, polarization, and empty cells at origin among minorities with respect to natives. Third, in a context with a strong OD association, a higher social fluidity among second generation immigrants compared to natives is most likely reflecting the weakness of social origin in protecting against downward mobility (especially unemployment), due plausibly to specific migration-related experiences of the first generation (Platt 2005c).

*Log-linear models for mobility tables*

A common methodological approach to assess intergenerational relative mobility chances is the estimation of log-linear models for mobility tables (Hout 1983). Log-linear models are a summarizing comparative tool used for the identification, clarification and generalization of large patterns of association resulting from cross tabulating the variables of interest. The log-linear model specifications tested below are based on a 4x4x7 (i.e. 112 cells) three-way contingency table which cross-classifies social origin (the row variable, O), destination (the column variable, D), and ethnic origin (the layer variable, M). The main aim is to ultimately assess the variation, if any, of the two-way OD association along ethnic origin categories (Breen 2004; Pisati 2000; Powers and Xie 2000).

The way models are specified responds to concrete hypotheses on the nature of the pattern of association between the different variables of interest. We can think of different

nested modelling strategies as a continuum. At one end, the Independence [O, D, M] and the Conditional Independence (CI) [e.g. OM, DM] models represent the theoretical notion of perfect mobility, or the assumption that relative mobility is not related to social origin (see *formula 1*). In fact, the Independence model assumes no association at all among the three variables in question, while the CI model hypothesises no association between social origin and destination for any country of origin group —i.e. O and D are assumed to be independent given M (Powers and Xie 2000).

CI model:

$$Log(F_{ijk}) = \lambda + \lambda_i^O + \lambda_j^D + \lambda_k^M + \lambda_{ij}^{OM} + \lambda_{ij}^{DM} \qquad (1)$$

$$\lambda_{ij}^{OD} = \lambda_{ijk}^{ODM} = 0$$

The CI model assumes the relationship between origin and destination to be explained by changes in the marginal distributions of these two variables. Therefore, if there is association between them across ethnic groups, this is assumed to happen at random. This model is often used as the starting point in the process of model selection, even if it is never expected to fit the data. Thus, it is unrealistic in both theoretical and statistical terms, as the vast research on social mobility, and the poor model fit statistics in the first row of *table 3.7* indicate (Chan and Boliver 2013; Hout and DiPrete 2006). The CI model is nevertheless useful, as it serves as a benchmark for assessing the fit of more realistic models or, in other words, how far the latter are from the notion of perfect mobility.

At the other end of the continuum there is the saturated model. This reproduces exactly the data in each cross-tabulation, as there are as many estimated parameters as existing data points[43]. The saturated model is always the least parsimonious one, and consequently also the least interesting of all possible modelling strategies for mobility research (Xie 1992). By contrast, it assumes an association between all pair of variables, which at the same time is different for every category of the third variable [ODM]. To find a solution that fits between these two ends of the continuum, which represent the simplest and the perfect possible fit of the data, a process of model selection based on the comparison between goodness-of-fit indicators across different unsaturated models is necessary.

[43] I.e. Observed are equal to expected frequencies.

Saturated model:

$$Log(F_{ijk}) = \lambda + \lambda_i^{O} + \lambda_j^{D} + \lambda_k^{M} + \lambda_{ij}^{OM} + \lambda_{ij}^{DM} + \lambda_{ij}^{OD} + \lambda_{ijk}^{ODM} \quad (2)$$

The guiding principle in the process of model selection is parsimony. This basically implies achieving a good-enough fit of the data with the fewest theoretically interpretable parameters (Breen 2004b; Xie 1992). If one was interested in the relative chances in vertical mobility, models could be also applied to off-diagonal cells only, by blocking diagonal cell frequencies —i.e. preserving their actual frequencies (Yamaguchi 1987)[44]. Here, however, I only comment on model fit statistics for models that account for diagonal cells. As Xie (1992:384) argues, excluding diagonal cells can be desirable in cases where the OD association is clearly dominated by inheritance processes. At the same time though, the exclusion of diagonal cells can also obscure the results across the groups being compared, especially in migration research where the inheritance assumption is a priori less plausible, at least for most of the groups.

Between the two ends, I estimate, for men and women separately, a model that assumes no association between ethnicity and both origin and destination [M, OD]; another model in which ethnicity is assumed to be only associated with origin but not destination [OD, MD]; and finally a 'full two-way' interaction model (FI) [OD OM MD]. The FI model is the most general unsaturated model, as it puts no restrictions on the net OD association, being as a result also less parsimonious (Torche 2011; Xie 1992; Yamaguchi 1987). It assumes the partial two-way OD association to be invariant across country of origin groups, as it does not model the ODM triple interaction, but all the other two-way interactions (Powers and Xie 2000:137) (see *formula 3*).

FI Model:

$$Log(F_{ijk}) = \lambda + \lambda_i^{R} + \lambda_j^{C} + \lambda_k^{L} + \lambda_{ik}^{OM} + \lambda_{jk}^{DM} + \lambda_{\boldsymbol{ij}}^{\boldsymbol{OD}} \quad (3)$$

*The uniform layer effects model*

To further understand the differences in relative mobility chances across ethnic-origin groups I use the Uniform Layer Effect Model (ULEM), which allows for a more parsimonious

[44] By blocking the diagonal cell-frequencies of the *K* tables I also obtain a better fit for the models. Excluding diagonal cells however can be also problematic as argued by Xie (1992).

comparative approach (Torche 2013). The parameters $\lambda_{ijk}^{OD}$ and $\lambda_{ijk}^{ODM}$ are the most important terms in model equations as they tell us the extent to which origin and destination are associated for a given group, as well as the variation of their association across different groups (or layers). The model specifications in *table 3.7* account for different baseline patterns of association, making different assumptions for the parameterization of $\lambda_{ijk}^{OD}$ and $\lambda_{ijk}^{ODM}$ (Powers and Xie 2000; Torche 2011)[45]. The $\lambda_{ijk}^{OD}$ and $\lambda_{ijk}^{ODM}$ parameterization is needed to understand the row-column association specific to each layer (Pisati 2000).

The ULEM model specification makes three main assumptions, which applied to this analysis take the following form: (1) there is an association between social origin (O) and destination (D), i.e. $\lambda_{ik}^{OD} \neq 0$; (2) the pattern of association between O and D is constant across ethnic origin categories; (3) the strength of the association between O and D varies between any pair of ethnic origin categories by a uniform amount (Pisati 2000).

There are two different types of ULEM, the Additive Layer Effect Model (ALEM) (Yamaguchi 1987), and the Log-Multiplicative Layer Effect Model (LMLEM) (Xie 1992). The main advantage of the latter over the former is that it is more flexible in specifying the OD association, as it allows it to vary log-multiplicatively across tables (Xie 1992:382). Thus, it falls in-between the restrictive case that imposes to all groups the same OD association, and the unconstrained case which allows all groups to have different parameters for the association (Xie 1992:386). In this way, it establishes that $\lambda_{ij}^{ODM} = \Psi_{ij}\phi_k$, where the $\Psi$ parameter describes the OD two-way deviation association, and the $\phi$ parameter indicates the minority-specific (M) deviations in this association (Powers and Xie 2000:142) (see *formula 4*). For the interpretation of the models presented it is common to compare the multiplicative layer-effect model to the null layer-effect one, as while the former assumes a non-homogeneous pattern of association between O and D across M, the latter assumes an homogeneous one $\lambda_{ijk}^{ODM} = 0$[46] (Erikson and Goldthorpe 1992; Xie 199; Yamaguchi 1987:484).

LMLEM:

$$Log(F_{ijk}) = \lambda + \lambda_i^O + \lambda_j^D + \lambda_k^M + \lambda_{ik}^{OM} + \lambda_{jk}^{DM} + \boldsymbol{\Psi_{ij}\phi_k}^{47} \qquad (4)$$

[45] To account for the occurrence of zero cell entries (sampling zeros) I increase cell frequencies by adding a small constant of 0.5. This is a common procedure as the log of 0 is minus infinity, and this would distort the results obtained from the models (Everitt 1992; Goodman 1991; Platt 2005d).

[46] Equivalent to the full-interaction model (FI) described above.

[47] In the formula for the log-multiplicative model, the parameters of interest are $\Psi ij$ and $\phi_k$. The former describe the origin-destination association, which can be argued to follow different patterns, and the latter is a multiplier to measures table or group-specific deviations from the general OD association (Xie 1992a:382).

The goodness of fit of the LMLEM or UNIDIFF model is mostly assessed against two benchmark model specifications, which assume either conditional independence (CI) or null-layer effects (equivalent to FI). In *table 3.7* I provide different comparative goodness-of-fit statistics for men and women separately also for the previous models discussed above, as well as a $X^2$ test on the $G^2$ differences between the UNIDIFF and the FI (or CnSF) models. Overall, and as expected, I find strong evidence against the null hypothesis of no association between origin and destination. Moreover, the FI and the UNIDIFF specifications present the best fit of the data for both men and women, although in the case of women the FI model does not seem to adjust as well as it does for men.

The UNIDIFF model shows however the best fit for both men and women according to all the fit statistics reported except BIC[48]. Thus, the UNIDIFF model presents the smallest $G^2$ statistic, as well as the smallest index of dissimilarity —Δ=1% for both sexes. The index of dissimilarity, contrary to $G^2$, is not sensitive to sample size and indicates the percentage of misclassified cases —i.e. those that would need to change for the observed and expected distributions to be identical. A commonly used convention is to accept model specifications for which this index is smaller than 3%. The UNIDIFF model also presents the highest $rG^2$ (not reported in the table, men=99.1 /women= 99.3%), which indicates the extent to which the OD association is accounted for by the UNIDIFF model compared to the benchmark model of independence. The $X^2$ test on the $G^2$ difference between the UNIDIFF and the FI (or CnSF) models in the last column of table 3.7 is also statistically significant indicating the better fit of the former model specification over the latter.

*Table 3.7 Goodness-of-fit statistics for different log-multiplicative model specifications*

| | *Men* | | | | | | *Women* | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Model: | G2 | df | Sig. | BIC | Δ | Sig.* | G2 | df | Sig. | BIC | Δ | Sig.* |
| O, M, D | 6966.2 | 108 | 0.000 | 5996.6 | 0.34 | | 8823.4 | 108 | 0.000 | 7825.8 | 0.33 | |
| M, OD | 4031.6 | 95 | 0.000 | 3178.7 | 0.22 | | 6069.1 | 95 | 0.000 | 5191.6 | 0.25 | |
| OM, DM | 628.3 | 63 | 0.000 | 63.1 | 0.12 | | 729 | 63 | 0.000 | 147.4 | 0.1 | |
| OD, OM | 169.7 | 72 | 0.000 | -476.8 | 0.03 | | 276.7 | 72 | 0.000 | -388.3 | 0.04 | |
| FI (or CnSF): OD, OM, DM | 65.4 | 54 | 0.140 | -419.1 | 0.02 | | 72.8 | 54 | 0.040 | -425.7 | 0.02 | |
| UNIDIFF | 42.4 | 48 | 0.700 | -388.2 | 0.01 | 0.000 | 57.9 | 48 | 0.160 | -385.2 | 0.01 | 0.021 |

Notes: *112 cells*. *df* represents residual degrees of freedom, *G2* is the log-likelihood ratio chi-square for goodness of fit, *Sig.* is the associated probability of G2 [P(X2df) ≥ L2], BIC is the Bayesian Information Criterion statistic, *Δ* is the index of dissimilarity, and *Sig.** is the associated probability of the chi-square test between the UNIDIFF and the CnSF models.

Source: *Understanding Society*, wave 1, author's analysis.

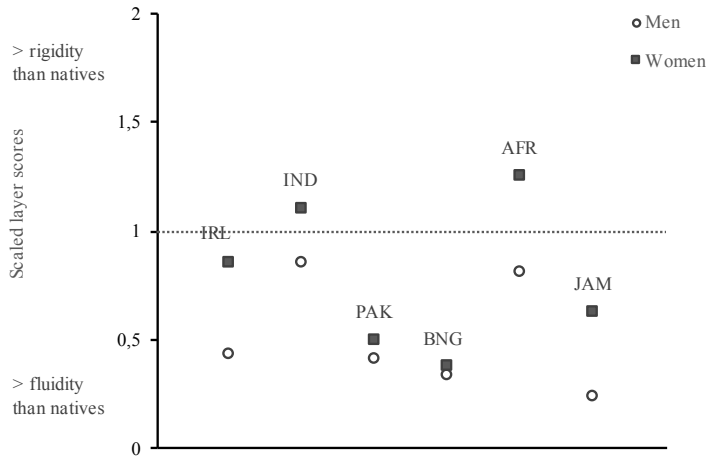
[48] The lowest the BIC value the better. With negative values of BIC the null hypothesis of model adjustment is not rejected relative to the saturated model (which has a BIC of 0) (Raftery 1988). Breen (2004b) argues that $G^2$ and Δ should have preference over BIC when evaluating the model fit, although BIC is the best fit statistic to assess parsimony (Torche 2011).

In *graph 3.10* I report the phi (ϕ) parameters (or layer scores) obtained from the UNIDIFF models for both men and women separately. Phi parameters are country-specific multiplicative scores —as seen in the formulas above— which show deviations from the direction of the overall average OD association pattern, which is given by psi (Ψ) parameters (Xie 1992:382). Phi parameters allow us to interpret M change in the OD association. The closer phi parameters are to 1, the weaker the hypothesis of independence, and vice versa. When scaled, layer scores are used to compare the general strength of the OD association for the different country of origin groups to that of the reference category —i.e. natives, for whom the parameter is fixed to 1. Scaled coefficients can therefore be interpreted as proportional changes with respect to the reference category (Torche 2011; Xie 1992).

Scaled layer scores derived from UNIDIFF models show, as partly seen in the odds-ratios table, that the strength of the OD association across groups and sexes is heterogeneous. Among men, all groups present lower scaled layer scores than natives, indicating that they experience more social fluidity than the latter. The scores of Indian and African men are the closest to that of native. For men in these two groups, the intergenerational association is 84 and 81% as large as the one for natives respectively, meaning that compared to the rest of the groups, they rely more on ascription, although still less than native men do. Irish and Pakistani present significantly lower values, both around 40%, and therefore closer to that of Bangladeshi and Jamaican men, the groups with the lowest scores. Among men, second generation immigrants can be therefore considered to be more fluid, and consequently they are expected on average to rely less on ascription and more on performance in order to achieve different occupational positions than their parents at destination in the host society. However, the intensity of this common relative pattern varies significantly across ethnic-origin groups.

For women, observed relative mobility patterns are somehow different than those of men. The main difference with respect to the latter is that not all second generation women are more socially fluid than native. Thus, Indian women are as equally fluid/rigid as native, while among African women the intergenerational OD association is 24% larger than that of native. On the other extreme, we find Bangladeshi and Pakistani women. They are more mobile in relative terms, as the OD association is half as strong as the one for natives in the case of Pakistani women, and one third as strong in the case of Bangladeshi. Jamaican women follow with a layer score of 62%. Finally, Irish women are, after Indian, the ones with the closest relative mobility pattern with respect to native.

*Graph 3.10 Scaled layer scores by gender (ref. natives)*




Source: *Understanding Society*, wave 1, author's analysis.

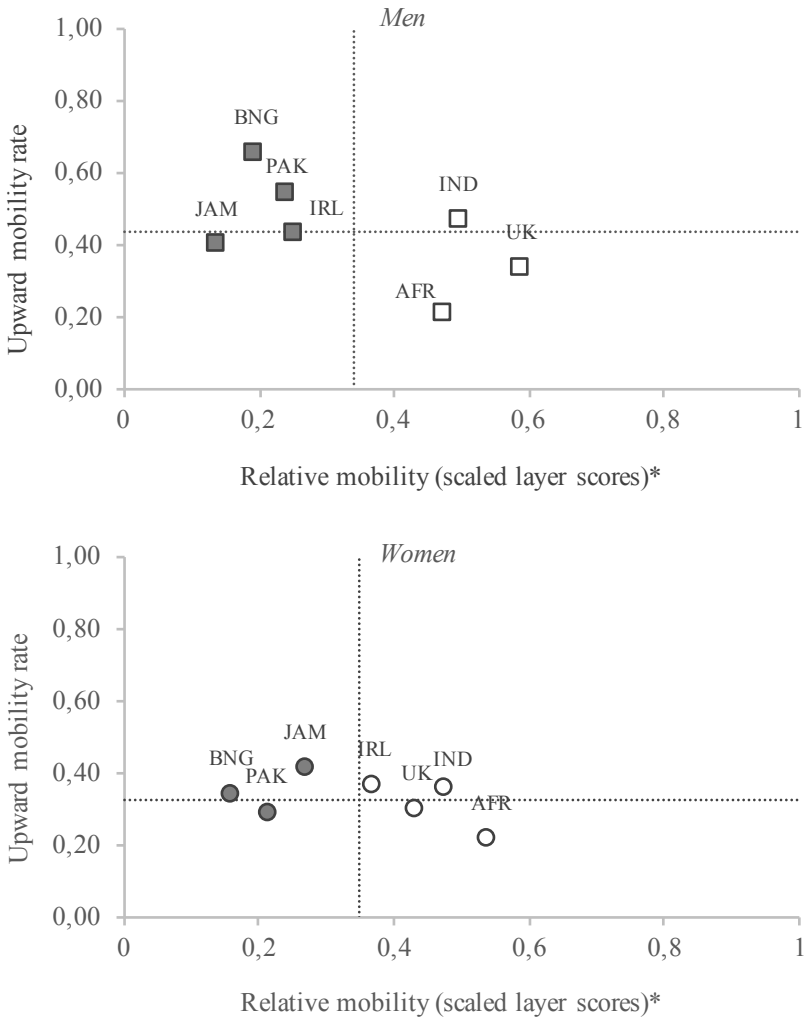
*Absolute and relative mobility rates compared*

As pointed out above it is informative to compare absolute and relative mobility patterns across groups, as high absolute mobility rates might coexist with high unequal relative opportunities to move up in the social ladder according to one's social origin. The relationship between absolute and relative patterns is not always discussed in mobility studies, although it is key to understand how both characteristics and changes in the class structure relate to changes in opportunities, especially in migration research. To see the extent to which the latter is true for each ethnic-origin group, in *graph 3.11* I plot the correspondence/difference between levels of upward absolute mobility (y axis) and UNIDIFF layer scores for relative mobility (x axis) by gender. The dotted horizontal lines in each subgraph indicate average values, and the filled markers differentiate groups with below-average values of relative mobility from the rest. The graph describes four scenarios in which we can classify ethnic-origin groups: high UMR and high relative mobility, low UMR and low relative mobility, high UMR and low relative mobility, and low UMR and high relative mobility.

Overall, women show more ethnic origin variation in relative rather than absolute terms, while men exhibit variation in both. Second generation Pakistani, Bangladeshi and Jamaican men and women experience the highest social fluidity, which for Pakistani and Bangladeshi men coexists with the highest absolute upward mobility rates across groups. Despite coming from similar class origins than their male counterpart, women from these two groups have lower upward mobility rates, especially Pakistani, although this is not the case of Jamaican. On the

opposite quadrant of the graph, native and African men and women combine more social rigidity with low levels of upward mobility. Indian men and women, and to a lesser extent Irish women, are the clearest example of how high —i.e. above average— levels of upward mobility rates can coexist with a relatively high inequality of opportunity, which for Indian and Irish women, as we have seen in the previous subsection, is higher than for native. The least well-off groups are Jamaican men and Pakistani women. Even if they experience fluidity, they exhibit at the same time below-average upward mobility rates across generations, as well as above-average downward moves.

*Graph 3.11 Correspondence between absolute and relative mobility patterns*




Notes: *The sum of each group-specific squared layer score equals to 1.
Source: *Understanding Society*, wave 1, author's analysis.

### 3.6 Summary and discussion

In this chapter I have addressed the question of whether the OD association differs across ethnic origin groups. In absolute terms, as hypothesized, the marked ethnic-group variation at origin determines the mobility patterns of the second generation, which basically respond to a general process of class re-adjustment towards the mean class distribution. Despite the upgrading class structure of more disadvantaged groups with more room for improvement, initial differences persist at destination, although to a lesser extent. Inflow rates have shown that the higher classes of more disadvantaged groups recruit the highest share of persons from low social origins. They have also shown though that immobility at the bottom is higher than immobility at the top of the class structure, although more advantaged ethnic-origin groups tend to be highly immobile at the top. In terms of outflows, I have observed similar intergenerational transition patterns for second generation immigrants and natives, although these differ in intensity across ethnic origin and gender.

Regarding relative mobility, I conclude that there is a common OD association pattern for both men and women across groups, but that this differs in strength by ethnic origin. Odds-ratios have shown that, as hypothesized, inequality of opportunity is higher for natives than for the second generation. I have also argued that while among natives, men present more social rigidity than women, among the second generation the opposite is true. Log-multiplicative models have confirmed that while the OD association varies in strength by ethnic origin, there is a common class mobility pattern across ethnic groups. UNIDIFF models —which assumes that the strength of the OD association varies between ethnic origin categories— provided the best fit of the data. Scaled layer scores derived from these models have shown that while in the case of men natives are more socially rigid than any other group; among women, Indian and African present more social rigidity. Men and women from the same ethnic origin have in some cases substantial differences on the strength of the OD association, reaffirming the importance of running separate analyses by gender.

Overall the findings of this chapter present similarities with those of the recent study of Li and Heath (2016) on minority and majority social mobility in Britain between 1982 and 2011, and those of Platt (2005) on the intergenerational social mobility of natives, Indians, and Caribbeans in Britain[49]. The main conclusion of Li and Heath, who analyse the mobility

[49] In chapter 5, I discuss my findings in light of those of other central articles on migration and intergenerational mobility such as Platt (2007) and Zuccotti (2014).

patterns of the first and second generation, is that there is a migration penalty —i.e. higher downward mobility rates for the first generation— rather than an ethnic one (2016:194). The authors argue that differences between the second generation and natives in relative mobility are overall small, although UNIDIFF models provide a significant improvement in fit. According to the authors, standard processes of class reproduction apply to the second generation in a similar way than to natives. However, they also argue that second generation African men seem to experience higher rates of both downward mobility and fluidity with respect to their native peers, which result in a situation of perverse openness for the former. This implies that, in the UK, the offspring of high status African immigrants (highly positively selected) faces more difficulties to achieve comparable positions for itself.

Another central finding of Li and Heath is the persistence of high unemployment among second generation men and women, particularly the inheritance of worklessness among men. The authors find that two black groups (Caribbean and African), together with Bangladeshis and Pakistanis, have a higher risk of unemployment than white men and women from similar social origins. To focus only on the mobility chances of those in work might result therefore in a misleading optimistic view of the labour market integration of the second generation. The authors conclude that while class clearly matters, we cannot rule out the role of ethnic origin in processes of socioeconomic attainment (2016: 194).

Similarly, Platt (2005) concludes that the OD association remains comparable within groups suggesting that class operates in different but nevertheless predictable ways across and within ethnic groups. Comparing Indians and Caribbeans with natives, the author concludes that while Indians retain to a certain extent their class position over generations, Caribbeans are not able to maintain advantages associated with more privileged origins. This finding resembles what Li and Heath also find for the case of Africans. Platt argues that for second generation Caribbeans, particularly men, this is explained by a "loss of positive selection effects" in "an environment that is antipathetic to their success" (2005:258-59).

In line with the findings of both articles, I contribute to the literature by reaffirming that while the OD association pattern is constant for second generation immigrants and natives, the magnitude of this association differs by ethnic origin. I find that UNIDIFF models provide a better fit than Constant Social Fluidity (CnSF) models. I conclude that second generation African and Jamaican men combine higher fluidity with below-average absolute upward mobility rates (especially Jamaican) compared to native men. This finding is in line with the idea of perverse openness pointed out by both Li and Heath (2016) and Platt (2005). For women in these two groups, this does not seem however to be the case.

Overall, building on the findings of Platt (2005), I find that while among natives inequality of opportunity is higher for men than for women, among the second generation this is overall higher for women —i.e. women are more dependent on social origin than their male counterparts. Regarding the inheritance of worklessness, and in line with Li and Heath (2016), I find African and Jamaican second generation men and women to be the most likely to reproduce their disadvantaged status in absolute terms, followed by Pakistanis and Bangladeshis (not in the case of men). In the following chapters I discuss more in depth the mechanisms behind these findings.

## 3.7 Appendix

*Table A3.1 NS-SEC class versions (eight, five and three categories)*

| **NS-SEC 8** | **NS-SEC 5** | ***NS-SEC 3*** |
|---|---|---|
| 1. Higher managerial, administrative and professional occupations | 1. Higher managerial, administrative and professional occupations | *1. Higher managerial, administrative and professional occupations* |
| 1.1 Large employers and higher managerial and administrative occupations | | |
| 1.2 Higher professional occupations | | |
| 2. Lower managerial, administrative and professional occupations | | |
| 3. Intermediate occupations | 2. Intermediate occupations | *2. Intermediate occupations* |
| 4. Small employers and own account workers | 3. Small employers and own account workers | |
| 5. Lower supervisory and technical occupations | 4. Lower supervisory and technical occupations | *3. Routine and manual occupations* |
| 6. Semi-routine occupations | 5. Semi-routine and routine occupations | |
| 7. Routine occupations | | |
| 8. Never worked and long-term unemployed | * Never worked and long-term unemployed | **Never worked and long-term unemployed* |

Source: Adapted by the author from Rose and Pevalin (2003).

*Table A3.2 Summary statistics by ethnic origin and gender*

| | | Country of origin | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | ALL (n=18,394) | | UK (n=15,528) | | IRL (n=754) | | IND (n=622) | | PAK (n=433) | | BGD (n=292) | | AFR (n=183) | | JAM (n=582) | |
| Variables | Range | M | W | M | W | M | W | M | W | M | W | M | W | M | W | M | W |
| *Class origin* | 1-4 | | | | | | | | | | | | | | | | |
| Managerial & prof. | 1 | 31.2 | 30.5 | 32.1 | 31.6 | 30.9 | 27.8 | 30.7 | 31.3 | 11.9 | 14.8 | 8.6 | 3.7 | 50.7 | 55.3 | 24.8 | 22.0 |
| Intermediate | 2 | 24.1 | 24.7 | 25.0 | 25.8 | 27.9 | 23.3 | 12.5 | 14.6 | 20.3 | 19.1 | 9.4 | 14.0 | 15.9 | 14.9 | 19.2 | 23.1 |
| Semi-routine & routine | 3 | 38.7 | 37.6 | 38.4 | 37.5 | 37.5 | 40.6 | 46.8 | 41.8 | 40.1 | 34.8 | 35.2 | 26.8 | 21.7 | 21.9 | 45.3 | 45.7 |
| Not working | 4 | 6.1 | 7.1 | 4.5 | 5.1 | 3.6 | 8.3 | 10.0 | 12.3 | 27.7 | 31.3 | 46.9 | 55.5 | 11.6 | 7.9 | 10.8 | 9.2 |
| *Class destination* | 1-5 | | | | | | | | | | | | | | | | |
| Managerial & prof. | 1 | 41.8 | 34.3 | 41.7 | 34.6 | 51.1 | 39.9 | 50.4 | 33.3 | 31.6 | 17.6 | 29.7 | 18.3 | 44.9 | 46.5 | 31.8 | 37.5 |
| Intermediate | 2 | 21.4 | 21.3 | 21.0 | 21.7 | 21.6 | 19.5 | 25.7 | 23.4 | 26.6 | 14.1 | 26.6 | 11.6 | 26.1 | 17.5 | 18.7 | 21.2 |
| Semi-routine & routine | 3 | 29.7 | 25.5 | 30.5 | 26.9 | 21.6 | 22.6 | 20.7 | 19.3 | 32.8 | 12.9 | 28.9 | 14.0 | 17.4 | 14.9 | 28.0 | 19.6 |
| LT unemployed | 4 | 5.4 | 4.1 | 5.0 | 3.5 | 3.9 | 5.2 | 2.1 | 3.5 | 8.5 | 8.2 | 10.2 | 7.9 | 10.1 | 9.7 | 16.8 | 11.4 |
| Inactive | 5 | 1.8 | 14.8 | 1.7 | 13.3 | 1.8 | 12.8 | 1.1 | 20.5 | 0.6 | 47.3 | 4.7 | 48.2 | 1.5 | 11.4 | 4.7 | 10.3 |
| *Education* | 1-4 | | | | | | | | | | | | | | | | |
| No qualification | 1 | 9.1 | 9.6 | 9.1 | 9.8 | 6.9 | 9.5 | 6.4 | 7.0 | 11.3 | 12.5 | 21.1 | 15.2 | — | 1.8 | 9.4 | 4.1 |
| GCSE & other | 2 | 31.6 | 34.5 | 32.1 | 35.0 | 27.6 | 32.5 | 22.5 | 29.8 | 27.1 | 34.8 | 38.3 | 37.2 | 14.5 | 15.8 | 38.3 | 33.2 |
| A-level & other | 3 | 33.3 | 32.1 | 33.8 | 32.1 | 34.8 | 31.8 | 29.3 | 33.0 | 27.7 | 30.5 | 20.3 | 31.1 | 30.4 | 35.1 | 34.1 | 34.0 |
| Degree | 4 | 26.0 | 23.8 | 25.0 | 23.1 | 30.6 | 26.1 | 41.8 | 30.1 | 33.9 | 22.3 | 20.3 | 16.5 | 55.1 | 47.4 | 18.2 | 28.8 |
| *Cohort* | 1-4 | | | | | | | | | | | | | | | | |
| 1945-1954 | 1 | 19.1 | 15.3 | 21.2 | 16.8 | 15.9 | 17.6 | 6.4 | 6.4 | 2.8 | 0.8 | 1.6 | — | — | 3.5 | 4.7 | 4.9 |
| 1955-1964 | 2 | 27.0 | 27.6 | 27.3 | 28.7 | 36.0 | 32.8 | 18.9 | 17.8 | 13.0 | 5.9 | 7.0 | 2.4 | 15.9 | 14.9 | 41.1 | 34.0 |
| 1965-1974 | 3 | 30.5 | 31.2 | 30.1 | 30.4 | 31.2 | 33.5 | 36.1 | 39.8 | 32.8 | 35.6 | 32.8 | 25.0 | 30.4 | 29.8 | 31.3 | 40.2 |
| 1975-1985 | 4 | 23.4 | 25.9 | 21.5 | 24.1 | 16.8 | 16.2 | 38.6 | 36.0 | 51.4 | 57.8 | 58.6 | 72.6 | 53.6 | 51.8 | 22.9 | 20.9 |
| *Age (M)* | 25-64 | 44.0 (11) | 43.0 (10) | 44.7 (11) | 43.6 (10) | 44.9 (9.6) | 45.0 (9.8) | 39.3 (9.2) | 39.5 (9.1) | 36.6 (8.5) | 34.4 (7.2) | 34.8 (6.9) | 32.5 (5.6) | 36.0 (8.8) | 36.5 (8.9) | 42.6 (9.0) | 42.4 (8.1) |

Notes: M/P= Means/Proportions. Standard deviations in parentheses.
Source: *Understanding Society*, wave 1, author's analysis.

*Table A3.3 Counts and marginal distributions across ethnic-origin groups (men)*

*UK*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 1,316 | 406 | 391 | 95 | 2,208 | 32.8 |
| II | 697 | 451 | 464 | 76 | 1,689 | 25.1 |
| III | 769 | 498 | 1,057 | 217 | 2,542 | 37.8 |
| IV | 87 | 52 | 120 | 34 | 292 | 4.3 |
| N | 2,870 | 1,408 | 2,032 | 422 | 6,731 | |
| % | 42.6 | 20.9 | 30.2 | 6.3 | | |

*IRL*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 62 | 25 | 20 | 2 | 110 | 33.6 |
| II | 53 | 19 | 14 | 7 | 93 | 28.4 |
| III | 50 | 28 | 31 | 5 | 114 | 34.8 |
| IV | 5 | 2 | 2 | 2 | 10 | 3.2 |
| N | 170 | 74 | 68 | 16 | 328 | |
| % | 51.9 | 22.5 | 20.7 | 4.9 | | |

*IND*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 59 | 16 | 11 | 5 | 91 | 33.6 |
| II | 14 | 14 | 5 | 1 | 33 | 12.3 |
| III | 51 | 38 | 29 | 5 | 123 | 45.1 |
| IV | 10 | 4 | 9 | 1 | 24 | 9.0 |
| N | 135 | 72 | 54 | 12 | 272 | |
| % | 49.5 | 26.5 | 19.8 | 4.3 | | |

*PAK*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 9 | 7 | 5 | 1 | 22 | 13.0 |
| II | 17 | 10 | 9 | 2 | 38 | 22.4 |
| III | 29 | 12 | 24 | 3 | 68 | 39.8 |
| IV | 9 | 14 | 11 | 8 | 43 | 24.9 |
| N | 64 | 43 | 50 | 15 | 172 | |
| % | 37.5 | 25.1 | 28.9 | 8.5 | | |

*BNG*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 6 | 4 | 2 | 0 | 12 | 9.7 |
| II | 7 | 0 | 2 | 1 | 10 | 8.0 |
| III | 9 | 13 | 17 | 9 | 47 | 37.0 |
| IV | 18 | 25 | 10 | 5 | 58 | 45.3 |
| N | 40 | 43 | 30 | 15 | 127 | |
| % | 31.4 | 33.5 | 23.6 | 11.5 | | |

*AFR*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 17 | 10 | 9 | 1 | 37 | 54.2 |
| II | 2 | 7 | 2 | 1 | 12 | 16.7 |
| III | 4 | 3 | 5 | 1 | 13 | 19.5 |
| IV | 2 | 1 | 2 | 2 | 7 | 9.7 |
| N | 25 | 21 | 18 | 5 | 69 | |
| % | 36.5 | 30.6 | 25.9 | 7.0 | | |

*JAM*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 24 | 10 | 12 | 8 | 53 | 25.6 |
| II | 16 | 6 | 10 | 4 | 36 | 17.4 |
| III | 27 | 19 | 29 | 19 | 94 | 45.1 |
| IV | 9 | 1 | 10 | 5 | 25 | 11.9 |
| N | 76 | 36 | 61 | 35 | 208 | |
| % | 36.5 | 17.4 | 29.1 | 17.0 | | |

Notes: I "Managerial & professional", II "Intermediate", III "Semi-routine & routine" and IV "Not working".
Source: *Understanding Society*, wave 1, author's analysis.

*Table A3.4 Counts and marginal distributions across ethnic-origin groups (women)*

*UK*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 1,350 | 621 | 472 | 327 | 2,770 | 32.1 |
| II | 793 | 532 | 562 | 328 | 2,214 | 25.7 |
| III | 812 | 663 | 1,135 | 598 | 3,207 | 37.2 |
| IV | 81 | 67 | 135 | 147 | 430 | 5.0 |
| N | 3,035 | 1,884 | 2,304 | 1,399 | 8,622 | |
| % | 35.2 | 21.85 | 26.72 | 16.23 | | |

*IRL*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 65 | 21 | 15 | 16 | 117 | 28.5 |
| II | 36 | 23 | 25 | 14 | 99 | 24.1 |
| III | 58 | 34 | 42 | 29 | 163 | 39.5 |
| IV | 7 | 4 | 10 | 12 | 33 | 8.0 |
| N | 167 | 82 | 92 | 70 | 412 | |
| % | 40.6 | 20.0 | 22.4 | 17.0 | | |

*IND*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 62 | 16 | 14 | 17 | 109 | 32.7 |
| II | 23 | 19 | 6 | 6 | 54 | 16.0 |
| III | 38 | 35 | 34 | 27 | 134 | 40.0 |
| IV | 5 | 6 | 11 | 16 | 38 | 11.3 |
| N | 127 | 75 | 65 | 66 | 334 | |
| % | 38.1 | 22.6 | 19.5 | 19.9 | | |

*PAK*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 10 | 10 | 4 | 23 | 46 | 18.4 |
| II | 11 | 11 | 9 | 17 | 48 | 19.0 |
| III | 16 | 15 | 10 | 40 | 81 | 32.0 |
| IV | 12 | 5 | 12 | 48 | 78 | 30.6 |
| N | 50 | 40 | 36 | 127 | 253 | |
| % | 19.76 | 15.84 | 14.15 | 50.24 | | |

*BNG*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 5 | 2 | 0 | 0 | 7 | 4.1 |
| II | 11 | 2 | 12 | 12 | 37 | 22.6 |
| III | 4 | 6 | 16 | 19 | 45 | 27.7 |
| IV | 21 | 9 | 4 | 41 | 74 | 45.6 |
| N | 40 | 19 | 31 | 72 | 163 | |
| % | 24.8 | 11.7 | 19.2 | 44.3 | | |

*AFR*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 37 | 16 | 6 | 7 | 66 | 58.3 |
| II | 8 | 4 | 2 | 3 | 17 | 15.5 |
| III | 11 | 2 | 5 | 4 | 23 | 20.1 |
| IV | 0 | 1 | 2 | 5 | 7 | 6.2 |
| N | 56 | 23 | 15 | 19 | 113 | |
| % | 49.2 | 20.1 | 13.5 | 17.2 | | |

*JAM*

| Origin class | Destination class I | II | III | IV | N | % |
|---|---|---|---|---|---|---|
| I | 38 | 20 | 10 | 15 | 82 | 22.9 |
| II | 36 | 16 | 16 | 15 | 83 | 23.2 |
| III | 66 | 31 | 38 | 27 | 162 | 44.9 |
| IV | 7 | 2 | 6 | 18 | 32 | 9.0 |
| N | 146 | 69 | 70 | 75 | 360 | |
| % | 40.6 | 19.1 | 19.4 | 20.9 | | |

Notes: I "Management & professional", II "Intermediate", III "Semi-routine & routine", and IV "Not working".
Source: *Understanding Society*, wave 1, author's analysis.

*Table A3.5 Summary of mobility and inheritance patterns across ethnic-origin groups by gender*

| | *Men* | | | | *Women* | | | |
|---|---|---|---|---|---|---|---|---|
| COO | DMR | STAY | UMR | *N* | DMR | STAY | UMR | *N* |
| UK | 0.25 | 0.42 | 0.33 | *6,731* | 0.34 | 0.37 | 0.30 | *8,622* |
| IRL | 0.22 | 0.35 | 0.43 | *328* | 0.29 | 0.35 | 0.36 | *412* |
| IND | 0.16 | 0.38 | 0.46 | *272* | 0.26 | 0.39 | 0.35 | *334* |
| PAK | 0.16 | 0.31 | 0.53 | *172* | 0.41 | 0.31 | 0.29 | *253* |
| BNG | 0.14 | 0.21 | 0.65 | *127* | 0.28 | 0.39 | 0.34 | *163* |
| AFR | 0.35 | 0.45 | 0.20 | *69* | 0.34 | 0.45 | 0.21 | *113* |
| JAM | 0.30 | 0.30 | 0.39 | *208* | 0.29 | 0.30 | 0.41 | *360* |

Source: *Understanding Society*, wave 1, author's analysis.

*Table A3.6 Inflow rates across ethnic-origin groups (men)*

*UK*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 45.9 | 28.9 | 19.2 | 22.6 | 32.8 |
| II | 24.3 | 32.1 | 22.9 | 17.9 | 25.1 |
| III | 26.8 | 35.4 | 52.0 | 51.5 | 37.8 |
| IV | 3.0 | 3.7 | 5.9 | 8.0 | 4.3 |
| N | 2,870 | 1,408 | 2,032 | 422 | 6,731 |

*IRL*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 36.6 | 34.4 | 30.2 | 13.6 | 33.6 |
| II | 31.1 | 26.1 | 20.7 | 42.9 | 28.4 |
| III | 29.4 | 37.3 | 45.8 | 33.6 | 34.8 |
| IV | 2.9 | 2.2 | 3.3 | 9.9 | 3.2 |
| N | 170 | 74 | 68 | 16 | 328 |

*IND*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 44.2 | 22.0 | 20.2 | 45.4 | 33.6 |
| II | 10.5 | 18.8 | 9.3 | 7.2 | 12.3 |
| III | 37.6 | 53.1 | 53.8 | 42.3 | 45.1 |
| IV | 7.7 | 6.2 | 16.6 | 5.1 | 9.0 |
| N | 135 | 72 | 54 | 12 | 272 |

*PAK*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 13.7 | 15.5 | 11.0 | 8.9 | 13.0 |
| II | 26.4 | 24.2 | 17.6 | 15.1 | 22.4 |
| III | 45.6 | 27.9 | 48.9 | 18.2 | 39.8 |
| IV | 14.3 | 32.4 | 22.4 | 57.8 | 24.9 |
| N | 64 | 43 | 50 | 15 | 172 |

*BNG*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 15.9 | 10.4 | 5.4 | 0.0 | 9.7 |
| II | 17.3 | 1.0 | 5.1 | 8.9 | 8.0 |
| III | 21.9 | 30.8 | 55.2 | 59.0 | 37.0 |
| IV | 45.0 | 57.9 | 34.4 | 32.2 | 45.3 |
| N | 40 | 43 | 30 | 15 | 127 |

*AFR*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 66.7 | 47.8 | 52.4 | 23.6 | 54.2 |
| II | 7.8 | 33.0 | 10.7 | 13.9 | 16.7 |
| III | 15.6 | 16.3 | 25.7 | 29.9 | 19.5 |
| IV | 9.9 | 2.8 | 11.3 | 32.6 | 9.7 |
| N | 25 | 21 | 18 | 5 | 69 |

*JAM*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 31.3 | 27.8 | 19.8 | 21.2 | 25.6 |
| II | 20.8 | 17.8 | 16.0 | 12.1 | 17.4 |
| III | 35.8 | 52.6 | 47.7 | 53.1 | 45.1 |
| IV | 12.1 | 1.9 | 16.5 | 13.6 | 11.9 |
| N | 76 | 36 | 61 | 35 | 208 |

Source: *Understanding Society*, wave 1, author's analysis.

*Table A3.7 Inflow rates across ethnic-origin groups (women)*

*UK*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 44.5 | 33.0 | 20.5 | 23.4 | 32.1 |
| II | 26.1 | 28.3 | 24.4 | 23.4 | 25.7 |
| III | 26.7 | 35.2 | 49.3 | 42.7 | 37.2 |
| IV | 2.7 | 3.6 | 5.9 | 10.5 | 5.0 |
| N | 3,035 | 1,884 | 2,304 | 1,399 | 8,622 |

*IRL*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 39.1 | 26.0 | 16.2 | 22.3 | 28.5 |
| II | 21.8 | 28.5 | 27.3 | 19.8 | 24.1 |
| III | 34.8 | 41.0 | 45.6 | 40.8 | 39.5 |
| IV | 4.2 | 4.5 | 10.9 | 17.0 | 8.0 |
| N | 167 | 82 | 92 | 70 | 412 |

*IND*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 48.6 | 21.4 | 21.7 | 25.8 | 32.7 |
| II | 17.8 | 24.9 | 9.0 | 9.4 | 16.0 |
| III | 29.7 | 46.3 | 52.5 | 40.3 | 40.0 |
| IV | 3.9 | 7.3 | 16.7 | 24.5 | 11.3 |
| N | 127 | 75 | 65 | 66 | 334 |

*PAK*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 19.6 | 24.4 | 12.1 | 17.7 | 18.4 |
| II | 22.9 | 26.5 | 26.4 | 13.1 | 19.0 |
| III | 32.9 | 37.6 | 26.7 | 31.4 | 32.0 |
| IV | 24.6 | 11.5 | 34.9 | 37.9 | 30.6 |
| N | 50 | 40 | 36 | 127 | 253 |

*BNG*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 11.3 | 9.3 | 0.0 | 0.4 | 4.1 |
| II | 27.5 | 11.5 | 37.0 | 16.6 | 22.6 |
| III | 10.1 | 33.9 | 50.1 | 26.2 | 27.7 |
| IV | 51.1 | 45.2 | 13.0 | 56.8 | 45.6 |
| N | 40 | 19 | 31 | 72 | 163 |

*AFR*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 66.0 | 68.8 | 40.8 | 37.6 | 58.3 |
| II | 14.1 | 17.5 | 15.8 | 16.9 | 15.5 |
| III | 19.9 | 10.7 | 32.6 | 21.4 | 20.1 |
| IV | 0.0 | 3.0 | 10.8 | 24.1 | 6.2 |
| N | 56 | 23 | 15 | 19 | 113 |

*JAM*

| Origin class | Destination class I | II | III | IV | % |
|---|---|---|---|---|---|
| I | 25.8 | 29.8 | 13.9 | 19.3 | 22.9 |
| II | 24.6 | 22.7 | 23.4 | 20.5 | 23.2 |
| III | 45.1 | 45.1 | 54.1 | 35.9 | 44.9 |
| IV | 4.5 | 2.4 | 8.6 | 24.3 | 9.0 |
| N | 146 | 69 | 70 | 75 | 360 |

Source: *Understanding Society*, wave 1, author's analysis.

*Table A3.8 Outflow rates across ethnic-origin groups (men)*

*UK*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 59.6 | 18.4 | 17.7 | 4.3 | 2,208 |
| II | 41.3 | 26.7 | 27.5 | 4.5 | 1,689 |
| III | 30.3 | 19.6 | 41.6 | 8.6 | 2,542 |
| IV | 29.8 | 17.7 | 41.1 | 11.5 | 292 |
| % | 42.6 | 20.9 | 30.2 | 6.3 | 6,731 |

*IRL*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 56.4 | 23.0 | 18.6 | 2.0 | 110 |
| II | 56.8 | 20.7 | 15.0 | 7.5 | 93 |
| III | 43.9 | 24.2 | 27.2 | 4.8 | 114 |
| IV | 47.7 | 15.4 | 21.5 | 15.4 | 10 |
| % | 51.9 | 22.5 | 20.7 | 4.9 | 328 |

*IND*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 65.0 | 17.3 | 11.9 | 5.8 | 91 |
| II | 42.0 | 40.5 | 15.0 | 2.5 | 33 |
| III | 41.2 | 31.2 | 23.6 | 4.0 | 123 |
| IV | 42.7 | 18.3 | 36.7 | 2.4 | 24 |
| % | 49.5 | 26.5 | 19.8 | 4.3 | 272 |

*PAK*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 39.7 | 30.0 | 24.5 | 5.9 | 22 |
| II | 44.3 | 27.2 | 22.8 | 5.8 | 38 |
| III | 43.0 | 17.6 | 35.5 | 3.9 | 68 |
| IV | 21.6 | 32.7 | 26.0 | 19.8 | 43 |
| % | 37.5 | 25.1 | 28.9 | 8.5 | 172 |

*BNG*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 51.3 | 35.6 | 13.1 | 0.0 | 12 |
| II | 68.1 | 4.2 | 15.0 | 12.8 | 10 |
| III | 18.6 | 27.9 | 35.2 | 18.4 | 47 |
| IV | 31.2 | 42.8 | 17.9 | 8.2 | 58 |
| % | 31.4 | 33.5 | 23.6 | 11.5 | 127 |

*AFR*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 44.9 | 27.0 | 25.0 | 3.0 | 37 |
| II | 17.0 | 60.6 | 16.6 | 5.8 | 12 |
| III | 29.3 | 25.7 | 34.2 | 10.8 | 13 |
| IV | 37.2 | 9.0 | 30.2 | 23.6 | 7 |
| % | 36.5 | 30.6 | 25.9 | 7.0 | 69 |

*JAM*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 44.5 | 18.9 | 22.5 | 14.1 | 82 |
| II | 43.6 | 17.8 | 26.8 | 11.8 | 83 |
| III | 28.9 | 20.3 | 30.8 | 20.0 | 162 |
| IV | 37.3 | 2.7 | 40.5 | 19.5 | 32 |
| % | 36.5 | 17.4 | 29.1 | 17.0 | 360 |

Source: *Understanding Society*, wave 1, author's analysis.

*Table A3.9 Outflow rates across ethnic-origin groups (women)*

*UK*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 48.7 | 22.4 | 17.1 | 11.8 | 2,770 |
| II | 35.8 | 24.0 | 25.4 | 14.8 | 2,214 |
| III | 25.3 | 20.7 | 35.4 | 18.7 | 3,207 |
| IV | 18.8 | 15.6 | 31.5 | 34.1 | 430 |
| % | 35.2 | 21.9 | 26.7 | 16.2 | 8,622 |

*IRL*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 55.8 | 18.2 | 12.7 | 13.3 | 117 |
| II | 36.8 | 23.7 | 25.5 | 14.0 | 99 |
| III | 35.8 | 20.8 | 25.9 | 17.6 | 163 |
| IV | 21.5 | 11.4 | 30.7 | 36.5 | 33 |
| % | 40.6 | 20.0 | 22.4 | 17.0 | 412 |

*IND*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 56.6 | 14.8 | 12.9 | 15.7 | 109 |
| II | 42.3 | 35.1 | 11.0 | 11.6 | 54 |
| III | 28.3 | 26.1 | 25.6 | 20.0 | 134 |
| IV | 13.2 | 14.7 | 28.9 | 43.3 | 38 |
| % | 38.1 | 22.6 | 19.5 | 19.9 | 334 |

*PAK*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 21.1 | 21.0 | 9.3 | 48.5 | 46 |
| II | 23.8 | 22.1 | 19.6 | 34.5 | 48 |
| III | 20.3 | 18.6 | 11.8 | 49.2 | 81 |
| IV | 15.8 | 6.0 | 16.1 | 62.1 | 78 |
| % | 19.76 | 15.84 | 14.15 | 50.24 | 253 |

*BNG*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 69.0 | 26.8 | 0.0 | 4.2 | 7 |
| II | 30.1 | 5.9 | 31.4 | 32.6 | 37 |
| III | 9.1 | 14.3 | 34.7 | 41.9 | 45 |
| IV | 27.8 | 11.6 | 5.5 | 55.1 | 74 |
| % | 24.8 | 11.7 | 19.2 | 44.3 | 163 |

*AFR*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 55.7 | 23.7 | 9.5 | 11.1 | 66 |
| II | 44.7 | 22.7 | 13.8 | 18.8 | 17 |
| III | 48.9 | 10.8 | 22.0 | 18.3 | 23 |
| IV | 0.0 | 9.6 | 23.6 | 66.8 | 7 |
| % | 49.2 | 20.1 | 13.5 | 17.2 | 113 |

*JAM*

| Origin class | Destination class I | II | III | IV | N |
|---|---|---|---|---|---|
| I | 45.7 | 24.8 | 11.8 | 17.7 | 82 |
| II | 43.2 | 18.7 | 19.6 | 18.5 | 83 |
| III | 40.8 | 19.1 | 23.4 | 16.7 | 162 |
| IV | 20.2 | 5.1 | 18.5 | 56.3 | 32 |
| % | 40.6 | 19.1 | 19.4 | 20.9 | 360 |

Source: *Understanding Society*, wave 1, author's analysis.

*Table A3.10 Scaled Phi parameters*

| Country of origin: | Men | Women |
|---|---|---|
| UK | 1 | 1 |
| Ireland | 0.4272 | 0.851 |
| Indian | 0.8431 | 1.0982 |
| Pakistan | 0.4065 | 0.4908 |
| Bangladesh | 0.3314 | 0.367 |
| Africa | 0.8055 | 1.2456 |
| Jamaica | 0.2336 | 0.6201 |

Source: *Understanding Society*, wave 1, author's analysis.

# CHAPTER 4. THE WORKING MOTHER AND MOTHER-IN-LAW EFFECTS. GENDER GAPS AND IMMIGRANT DIFFERENTIALS IN LABOUR-FORCE PARTICIPATION

"It would make no sense to explore ethnicity without taking into account its interaction with gender."

"[…] substantial gender differences continue to characterise the labour market distribution of each of the groups and, on the whole, they are more substantial than ethnic group differences."

Paul Iganski and Geoff Payne,
*Declining racial disadvantage in the British labour market*

## 4.1 Introduction

Gender and country of origin are strongly associated with labour-force participation (LFP) (Fleischmann and Höhne 2013). On one hand, women tend to participate less than men in the labour force despite the exponential increase in female participation rates across European countries since the second half of the 20th Century. This increase in participation has been mainly due to educational expansion and the rise of secularization together with the emergence and propagation of more egalitarian gender role attitudes (Guetto et al. 2015). On the other hand, immigrant and native-born persons with an immigrant background participate less, on average, in the labour force compared to natives. There is however significant variation across and within ethnic-origin groups in different host societies. The United Kingdom is a paradigmatic example of this twofold variation, as some groups participate more and other less than natives in the labour force, and at the same time significant within-group differences in participation are observed (Carmichael and Woods 2000; Heath and Cheung 2007).

Gender differences in labour-market outcomes are understudied in ethnic stratification research. Gender processes have been, together with social origin, overlooked by the notion of ethnic penalty, despite the fact that gender is often identified as a predominant source of disadvantage over ethnicity in the labour market (Guinea-Martin, Mora, and Ruiz-Castillo 2015; Iganski and Payne 1996; Iganski, Payne, and Roberts 2001). My overall goals in this chapter are on one hand to assess the extent to which gender gaps in LFP among the general population generalise to different ethnic-origin groups, and on the other, to test whether different explanations for female labour-force participation (FLFP) also hold true for first and

second generation immigrant women. The identification of compositional differences in individual and family-related characteristics, as well as differences in the nature of association between these characteristics and FLFP, is a necessary condition to posteriorly explain ethnic-group differences in other labour-market outcomes.

Gender gaps in LFP are greater than those in employment (conditional on participation) and occupational attainment (Fleischmann and Höhne 2013). Before running any statistical analyses comparing the labour-market outcomes of different ethnic-origin groups by gender, we need to be aware of the on-going selection into activity to avoid drawing biased conclusions based on selected sub-samples of active female respondents. It is precisely because a higher number of women are outside the labour force, and their participation behaviour is more affected by individual and couple-level factors, that the study of women's labour-market outcomes is more complex than men's, especially if the drivers of selection into participation in the labour force are not previously identified. In this chapter I discuss the sources of women's selection into the labour force, and how this selection can affect ethnic group comparisons in labour-market outcomes that are conditional on participation (Longhi and Nandi 2015).

LFP is a comprehensive variable. Unlike the case of other labour-market outcomes, LFP can be conceptualized as a 'voluntary' choice[50]. Contrarily for instance to unemployment and occupational attainment, LFP is less likely to be determined by factors external to people's will/control, and therefore more dependent on individual attitudes and preferences. Inactivity is more often an available option to consider for women than for men, and decisions to be inactive might vary significantly across different ethnic-origin groups. In normal conditions, participation is almost entirely subject to women's decisions, and this is the main reason why one could argue that women who are active constitute a self-selected sample (Khoudja and Fleischmann 2015a:94; Khoudja and Platt 2016). For some women in particular groups, inactivity related to domestic work might be more socially legitimated or even encouraged, while other women might perceive it as a burden. We might also expect within-group variation in these perceptions driven by differences on key associated correlates of participation (Kane 2000).

Even though in this chapter I only focus on a binary measure of labour force participation, a complementary outcome to a it are part-time arrangements or 'marginal' jobs. Some women

[50] We could alternatively argue that there might be a discouraged worker effect on LFP due to a situation of long-term unemployment. Although this hypothesis is plausible, I defend the idea that differences in participation between and within ethnic origin groups are mostly driven by variation in different individual and couple-level factors.

tend to reduce their job hours over their life-course, while being still counted as active. Part-time jobs are more linked to employment exits and lower occupational attainment, and often denote more accurately than a binary measure of LFP alternative priorities to paid full-time employment (Taniguchi and Rosenfeld 2002). As Hakim (2003) summarizes for married/partnered women, an important share of dual-earner couples are not dual-career couples, as women are more likely to occupy the role of secondary earners. LFP might be in this sense better conceptualized as a continuum rather than a binary process. Weekly job hours (including 0 as a lower bound) are therefore an informative complement to further understand participation[51].

FLFP is a policy relevant outcome. It is a basic indicator of the interrelated processes of immigrants' integration and female emancipation. The main contribution of this chapter is the consideration of the labour market experience of the previous generation of women —by including as predictors the mother and mother-in-law's[52] work statuses when the respondent was growing up— to explain FLFP, and particularly to account for immigrant penalties/premiums with respect to native women. Moreover, I test whether and the extent to which respondents' and partners' gender role attitudes, as well as partners' housework participation and other respondents' individual-level characteristics, mediate the intergenerational transmission of inactivity among women.

*Types of inactivity across ethnic-origin groups*

For the analytical sample, I only consider to be inactive women whose activity status is looking after home and family. As I already discussed, housework is likely to derive from a 'voluntary' decision of non-participation in the labour force, which is precisely what I seek to explain in this chapter. Inactivity does not mean the same across ethnic-origin groups (see *graph 4.1*). Bangladeshi, Pakistani, and Indian women present comparatively the highest share of housework, with other types of inactivity being minor contributors. For Irish and native women instead, retirement[53] is also common, followed by full-time education, and long-term sickness/disability. For Jamaican women, with the lowest percentage of housewives in the sample, full-time education is the main type of inactivity. In the case of African women, full-

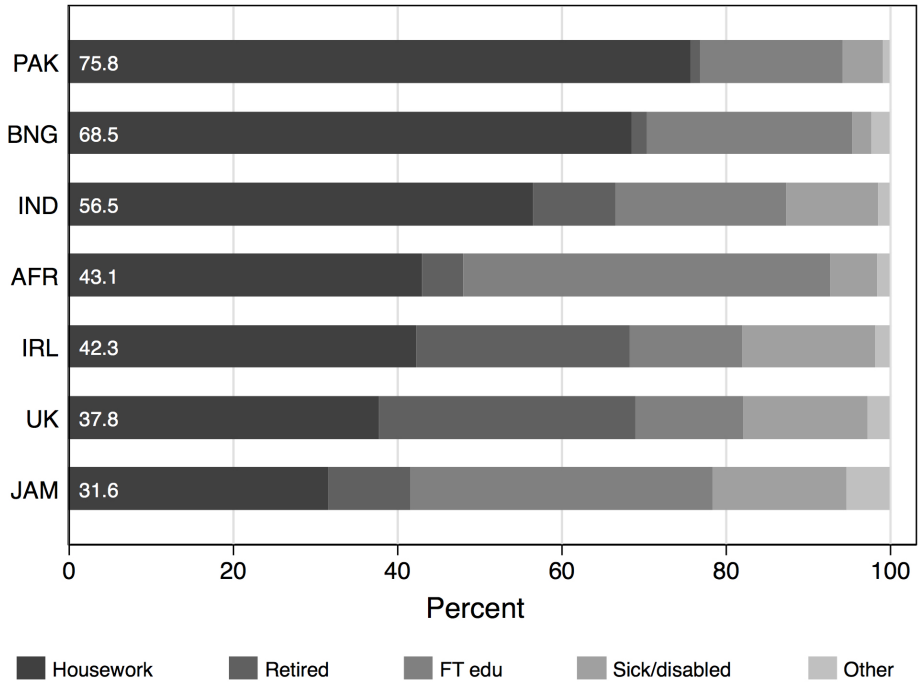
[51] Although this chapter focusses mostly on a binary measure of participation.

[52] For married or partnered women.

[53] The highest share of retirement for Irish and native women is most likely due to the fact that the upper age limit that defines the sample is too high (64 instead of 62 years) as already discussed is chapter 3. This does not have however any implications for the substantive analyses, as retired women are excluded from the sample.

time education is as important as housework in relative terms. This is likely to be due, among other reasons, to their young age structure. Differences among types of inactivity are therefore marked across groups. While about three out of four Pakistani inactive women are housewives, and therefore considered in the analytical sample along with active women, only about one third of inactive Jamaican women are.

*Graph 4.1 Types of inactivity by ethnic origin*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

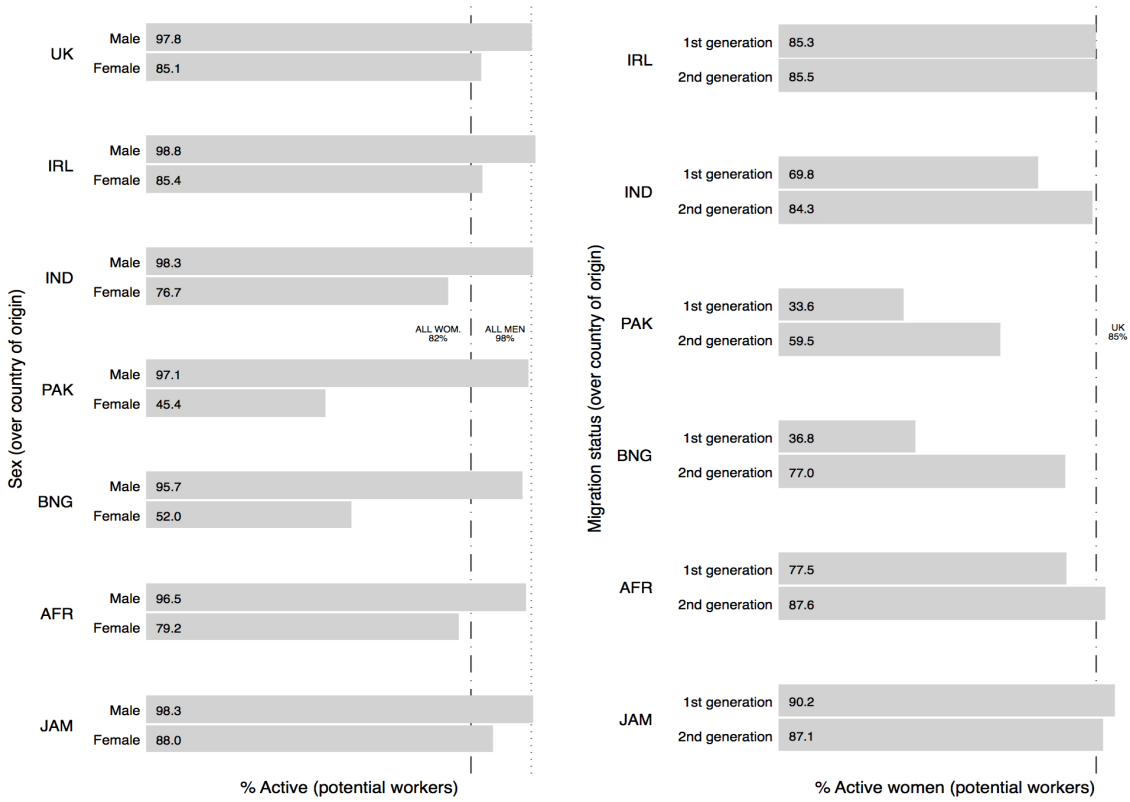
*Gender, migration status, and ethnic origin gaps in labour-force participation*

Overall, there are significant gender differences in LFP. As shown in the first sub-graph of *graph 4.2*, which considers potential workers, women are significantly underrepresented in the labour force compared to men. While 98% of men are active, only 83% of women are, resulting in an overall gender gap in LFP of 15 percentage points. This gap widens if we differentiate by ethnic origin, due to the substantial variation across groups in women's (not men's) LFP. Pakistani and Bangladeshi women, with 44 and 52% of active women respectively, present the lowest participation levels. The participation of Indian women in the labour force is also low, about five percentage points below the overall average for women (represented by the vertical

dashed lines in the graph). Women from Irish and British origins present similar levels of female activity, while almost 90% of potentially active Jamaican women are active, the highest participation across all groups.

For all origins, except Irish and Jamaican, I also observe significant participation gaps between first and second generation immigrants (see the right-hand side sub-graph in *graph 4.2*). Even if participation gaps with respect to native women (vertical dashed line) reduce substantively in the second generation among those groups with lower participation, significant differences persist for Pakistani and Bangladeshi women. For women in these two groups, the participation gap is reduced by half in the second generation, although participation remains 25 and 8 percentage points lower respectively compared to native women. Among Indian and African women instead, observed differences in LFP in the first generation no longer apply to the second at the descriptive level.

*Graph 4.2 Gender and immigrant labour force participation gaps over ethnic origin*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

In what follows, I aim at explaining why women from particular social and ethnic origins in the UK live more gendered lives, and participate accordingly substantially less in the labour force, than other with different background characteristics.

## 4.2 Theoretical background

In line with the main reasoning of this thesis, my hypotheses build on the idea that observed immigrant differentials in FLFP with respect to natives can be explained by non-ethnic individual and/or couple-level factors, and the interactions among themselves and ethnic origin and migration status. I discuss four main blocks of hypotheses related to both classical and more recent theories on FLFP at the individual and couple levels, and discuss the validity and adaptability of their postulates for migration research.

*The intergenerational reproduction of female labour market exclusion. The working mother effect*

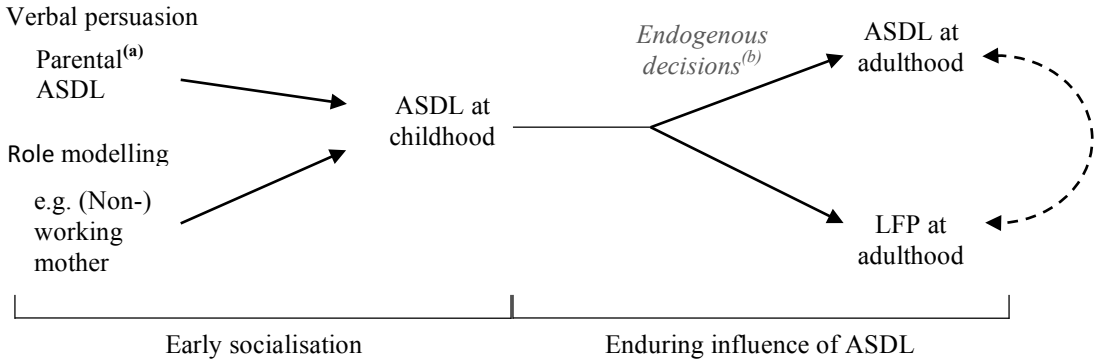
Adding up to the more consolidated line of research on the intergenerational transmission of parental class, occupational attainment, and earnings; there has been a renewed interest on whether and how culture is transmitted across generations, and the extent to which this process shapes the labour market decisions and behaviour of the offspring (Black and Devereux 2010). Polavieja defines culture as the "probabilistic tendency that members of a given social group share a given value, preference, or belief (i.e., a given trait) due to experiencing similar socialisation processes" (Polavieja 2015:170). Empirical research on FLFP has recently focused on the intergenerational transmission of gender role attitudes and the inheritance of the housewife status (Farré and Vella 2013). The observed heterogeneity of women's behaviour towards employment and family life can be thought as the outcome of differentiated early patterns of socialization on this regard (Crompton and Harris 1998).

In this process of cultural transmission, parents are considered as distinct socialization agents, as the transmission of attitudes and behaviour is often found to be stronger across same-sex dyads (Platt and Polavieja 2016:12). In this line, several studies conclude that the social reproduction of gender inequality is likely to be driven by the association between mother's and daughter's traits, behaviour, and attitudes. This association persists after accounting for the socio-economic status of the family, indicating that childhood attitudes towards the sexual

division of labour have an enduring effect in adulthood (Black and Devereux 2010; Mayer, Duncan, and Kalil 2004; Stevens and Boyd 1980).

Attitudes towards the sexual division of labour are transmitted early in life through two independent channels: parental verbal persuasion and role modelling (see *graph 4.3*). These two channels refer to the effect of parental attitudes and behaviour respectively on the attitudes of their offspring in early childhood/adolescence. The verbal persuasion channel —often used in economics— involves active parenting and assumes that parents transmit their believes, preferences, and values to their children purposively. On the other hand, the role modelling approach —more often used by sociologists— highlights the importance of passive socialization arguing that parents serve as role models for their children. These two channels are complemented by the process of horizontal transmission, which refer to the independent impact of cohort changes in gender role attitudes (Moen, Erickson, and Dempster-McClain 1997; Platt and Polavieja 2016:2–3).

*Graph 4.3 Intergenerational transmission channels of attitudes towards the sexual division of labour (ASDL)*




Notes: [a] Fathers and mothers are conceived as distinct socialisation agents.
[b] Endogenous mediators refer to family, educational, and occupational decisions during the life course.
Source: Adapted by the author from Platt and Polavieja (2016).

With UKHLS data, I cannot test the vertical persuasion channel. However, according to the findings of Platt and Polavieja (2016:12), parental behaviour is as important, or even more important, in affecting people's gender role attitudes at childhood and their posterior behaviour as adults. More specifically, the authors find that mother's time out of the labour force has a stronger effect on their children's attitudes towards the sexual division of labour than either

mother's or father's own attitudes, and regardless of parental education. I test therefore a role-modelling explanation with the work status of the mother of the respondent[54] as the main predictor. By considering mother's non-participation as an explanatory factor, we account for patterns of intergenerational transmission of inactivity, as preferences for inactivity/domestic work are shaped during the early socialization process. I argue that female respondents with a workless mother at the age of 14 are more likely to be exposed to an environment that favours more traditional views on gender roles while growing up, and that this is likely to have an enduring effect in their education, family, and labour market decisions as adults. The effect of mother's on daughter's LFP can be explained therefore in terms of the intergenerational transmission of a 'role model' (Davis and Greenstein 2009; Del Boca, Locatelli, and Pasqua 2000; Platt and Polavieja 2016).

We could expect education, among other factors, to mediate the association between a non-working mother and daughter's LFP; and also moderate it, with more educated daughters being less affected by their mother's work status (Moen et al. 1997). The extent to which factors related to life-course socialization such as education mediate this relationship might depend also on the homo/heterogamous nature of the socializing couple at origin. While homogamous families are expected to be more efficient in transferring cultural traits and role models contributing to the process of preference formation of their offspring, heterogamous families are more likely to be less efficient in doing so, and their offspring more exposed to external (to the family) socialization actors/institutions (Bisin and Verdier 2000:960). Education and family decisions are however endogenous to childhood attitudes, which at the same time are influenced by the behaviour of the mother. In this sense, some authors argue that it is better to test the intergenerational transmission of attitudes towards the sexual division of labour without including endogenous mediators (Platt and Polavieja 2016:4).

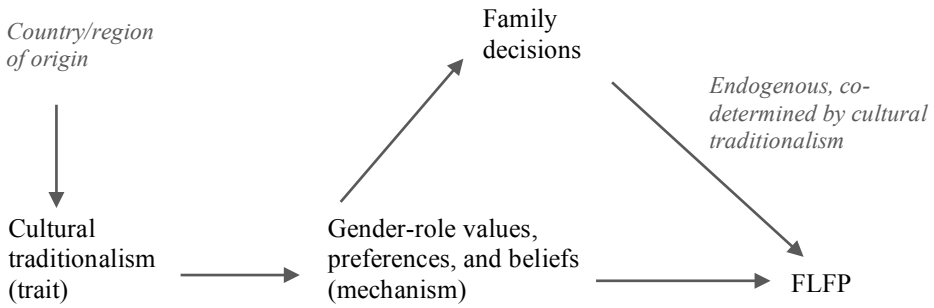
Despite the fact that the association between mother's and daughter's attitudes and behaviour has been observed in recent studies for the majority of the population, it has been rarely tested in migration research. As Polavieja (2015) points out, culture has a multilevel character. Thus, while nations are key sources of cultural variation, we also observe a high degree of individual-level variation within. Observed differences in gender role attitudes, and ultimately cultural traditionalism (trait), across ethnic groups are likely to be rooted in historical differences in FLFP and access to education in each of the origin countries being compared —

[54] With UKHLS data I cannot differentiate between active and inactive parents, but between working and non-working ones. Unemployed and inactive parents are therefore grouped together into the 'not-working' category.

but also within countries in their urban rural division (see *graph 4.4*) (Davis and Greenstein 2009).

We should also expect significant variation between and within ethnic-origin groups in LFP among first generation women by reason for migration. While women of particular groups come (or came) to the UK predominantly for working reasons —e.g. Jamaican—, other are more likely to entry the country through family reunification channels —e.g. Pakistani. On the other hand, evidence points in the direction that predominant pre-migration values and norms existing in the country of origin (e.g. cultural traditionalism) are also likely to be associated with a gendered behaviour in the second generation, particularly, but not only, in the context of childbearing (Holland and de Valk 2014; Idema and Phalet 2007).

*Graph 4.4 The effect of cultural traditionalism on family and labour-force participation decisions*




Source: Adapted by the author from Polavieja (2015:178).

Moreover, as some ethnic-origin groups (or at least sub-groups within them) are likely to have higher rates of homogamy than others, we could also hypothesise the former to be on average more efficient in influencing the process of preference formation of their offspring. Consequently, the offspring would be more likely to base decisions to participate in the labour force on the preferences formed within the family of origin, and therefore to be less influenced by education or other life-course socialization processes. By accounting for ethnic variation in FLFP in the maternal generation, we might therefore explain part of the observed ethnic gaps in participation for the offspring.

*Classical explanations: human capital and family structure*

Human capital theory (Becker 1975) is the most used individual-level account to explain labour market behaviour. Within this framework, education is often seen as an investment in a cost-benefit rationale based on individual expectations on labour-market outcomes. Those who invest time and resources in education expect their investment to pay-off in the form of higher LFP, but also better job opportunities and higher salaries. The cost of opportunity of not participating in the labour force is therefore much higher for those who have already invested in education.

Regarding the effect of education on the LFP of immigrant women, I expect variation in the strength, but not in the direction, of the effect across generation statuses and ethnic origins. It is well known that first generation immigrants face problems in translating their educational certificates, skills, and labour market experience in the host society (Friedberg 2000), and that this disadvantage can persist over time and even be transmitted to their descendants. For the second generation, in the absence of other forms of capital, investment in post-secondary education is however often the only 'rational' strategy to follow, despite being more likely to face important barriers to labour market entry and consolidation, and therefore higher costs compared to natives. While second generation immigrant women outperform native on average in educational attainment in the UK (although with significant compositional differences across ethnic-origin groups), this advantage does not seem to fully materialise in the labour market (Heath, Rothon, and Kilpi 2008; Platt 2007; Zwysen and Longhi 2016). I expect therefore education to be positively and strongly associated with FLFP, as the former is expected to protect women from non-participation. The importance of education on participation might however vary across ethnic-origin groups.

On top of that, and according to the household/family specialization theory (Becker 1991), partnership/marriage and the presence, number, and age of children in the household are expected to be negatively associated with FLFP. These factors might affect women by potentially shifting their preferences and behaviour from professional to domestic responsibilities. After partnering or marrying, women are more likely than men to assume the domestic workload within the household, which might lead to incompatibilities with full, or even part-time, employment (Kan, Sullivan, and Gershuny 2011).

The presence and number of children in the household is one of the most important correlates of women's non-participation in the literature. After giving birth to the first child, women often experience 'motherhood penalties' (Holland and de Valk 2014). Thus, compared

to their male counterparts, they are more prone to either quit their jobs or reduce their working hours as childbearing has traditionally been, and still is to a large extent, considered a female responsibility (Bernardi 1999). For those who do not quit paid employment after the first child, the likelihood of doing so increases as the number of children does. I expect therefore women living with their partners/spouses to be less likely to participate in the labour force than single women. I also expect women with dependent children at home —particularly if aged below 5– –, to also participate less in the labour force, especially if they are single mothers. I also expect that the higher the number of children, the lower the probability of participating. As in the case of education, I also contemplate the possibility that the strength of the effect of family structure on FLFP might vary across ethnic-origin groups.

Human capital and household conditions might however have an interrelated effect on FLFP (Khoudja and Fleischmann 2015b), mainly explained by gender role preferences. Thus, there might be women who invest less in education, as they already have a lower ambition regarding labour market prospects, and a stronger preference for housework and family care. For these women, the opportunity costs after childbirth for example are low as they did not previously invest in education. This results in higher incentives for them to remain at home rather than to return to the labour market. On the contrary, for women with a high level of education, the advent of a 'disruptive' LFP factor such as childbirth is not likely to change their labour market preferences, as the cost of doing so would be high.

*The impact of cultural factors: gender role attitudes and religiosity*

Gender role attitudes are the main mechanism of transmission between mother's and daughter's traits, as shown in *graph 4.4* above. Gender role attitudes (GRA) have been increasingly considered as a potential mechanism for predicting gendered behaviours (Davis and Greenstein 2009:100). Following Gambetta's (1987:27) argumentation, GRA are part of the broader classification of mechanisms of cultural causation in explaining labour market behaviour. Mechanisms of cultural causation can moreover be understood as a complement of social origin explanations, as they can potentially explain part of the inter-class differences in FLFP. Although several studies have found a strong association between GRA and housewifery for the general population (Guetto et al. 2015), the effect of GRA has been less often tested for explaining immigrant and ethnic origin differentials in FLFP.

Hakim's preference theory (1998, 2002, 2003) defends the idea of lifestyle preference groups[55], which hold lifestyle preferences (Focusing on sex-role ideologies and work orientations) that can be transversal to educational levels, social classes and income groups. The author therefore challenges the assumptions of human capital and mainstream feminist theories, and questions the argument that education qualifications are the main predictor of female participation/employment decisions. Contrary to the main postulates of human capital theory, Hakim's argument highlights the existence of self-selection into higher education, which she argues would explain the weakening influence of education over generations on sex-role ideology she founds for the UK[56]. The author defends that the effect of education is "bound up with self-selection into education beyond the compulsory minimum" (Hakim 2003:100).

In terms of ethnic differentials, Hakim (2003:143–47) argues that the mere existence of significant variation in participation patterns across ethnic-origin groups within the same country or institutional context (i.e. UK), is an indicator of the importance of cultural and ideological factors in shaping women's LFP decisions. Hakim (2003:146) and Kan and Laurie (2016) provide evidence of marked sex differences among ethnic-origin groups in sex-role ideology, and show that while African and Jamaican women tend to have more egalitarian family roles; Indian, Pakistani and Bangladeshi lean more towards patriarchal values.

Measures of GRA reflect respondent's positioning in terms of prescriptive beliefs towards the role of women in the domestic and public spheres. This positioning is expected to shape behaviour along and on top of the effects of other key explanatory factors. I expect GRA to account for part of the remaining differences in FLFP across ethnic-origin groups due to the high level of variation observed, i.e. more traditional GRA are expected to prevail within some groups rather than others (composition effect). Moreover, I also confirm whether the effect of GRA on FLFP vary across ethnic origins.

GRA exert direct and indirect effects on FLFP. Direct effects refer to the 'rational' decision of some women of prioritizing either housework or participation on top of other key factors such as social origin, household conditions, and human capital (Hakim 1998). It is also plausible however to find indirect effects on participation, which refer to the fact that more traditional GRA are negatively associated with the acquisition of human capital for example (Alwin, Braun, and Scott 1992). More traditional women are expected to abandon the

[55] Hakim (2003) provides evidence for the existence of three differentiated preference groups of women: home-centred, work-centred, and adaptive (the largest group).

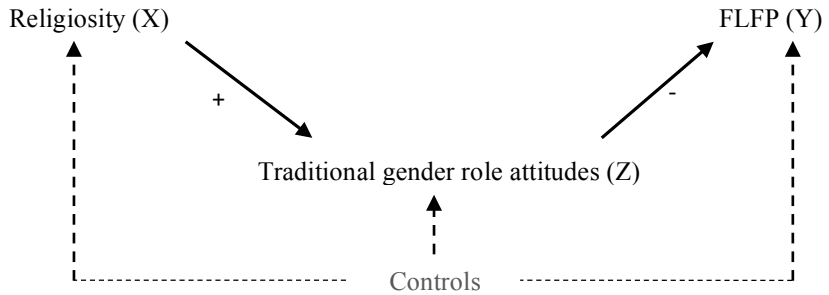
[56] The author also points out however that more education translates into a decrease on rigid role specialisation and patriarchal values.

educational system earlier, acquiring less education, and ultimately affecting negatively their labour supply (Farré and Vella 2013). I expect variation across ethnic-origin groups in GRA, as the latter are formed during early socialization and are likely to be influenced by country of origin aggregate attitudes and preferences towards the sexual division of labour.

Attitudes often change faster than social structures and behaviour, which might remain gendered. The actual behaviour of men and women in terms of hours dedicated to housework is therefore a useful complement to GRA. As some authors argue, even though we have assisted to a process of liberalization in GRA, this does not seem to have automatically translated into tangible behavioural changes, or at least these changes have evolved at a slower pace than attitudes (Crompton, Brockmann, and Lyonette 2005; Kan 2008; Kan and Laurie 2016). Moreover, the complementary use of time spent in domestic work seems appropriate in migration research, as some authors have implied that GRA (a more subjective measure) might not mean the same across ethnic-origin groups (Kane 2000). In their study, Kan and Laurie (2016) find that *ceteris paribus* Indian, Pakistani and Bangladeshi women spend on average more hours on housework than the rest of the groups, even after controlling for GRA.

Together with GRA, religious membership and religiosity are commonly used predictors of FLFP. Both are negatively associated with participation, and vary substantially across and within ethnic-origin groups. Some authors argue, however, that this negative relationship is mediated by GRA (Guetto et al. 2015). For instance, Hakim (2003:195) does not find religiosity *per se* to have a significant impact on lifestyle preferences. I expect higher levels of religiosity to be associated with lower participation, with this negative association being mediated by the fact that women who are more religious are at the same time more likely to hold more traditional GRA, which ultimately explain participation (see *graph 4.5*).

*Graph 4.5 The mediation effect of gender role attitudes between religiosity and FLFP*



*A couple-level approach to female labour-force participation*

Until recently, conventional approaches to FLFP have basically relied on both human capital and household conditions at the individual level. The situation of women in the labour force cannot be fully understood, however, without taking into account the household context. Complementing individual-level accounts with couple-level approaches allows for a more complete understanding of women's labour market behaviour, as we have a more comprehensive analytical framework for assessing it (Blossfeld and Drobnič 2001; Blossfeld, Drobnič, and Götz 1998). Moreover, some authors argue that the main postulates of these theories on the relationship between FLFP and partnership characteristics need to be revisited in the context of migration (Dale, Lindley, and Dex 2006).

If we focus only on women living with their partner or spouse (i.e. a couple-level analysis with information on both members), we can argue that not only their individual characteristics, but also their partners/spouses', are likely to influence their decision to participate in the labour force. Moreover, I expect significant ethnic compositional differences in partner characteristics, which are likely to be reinforced by the higher rates of both endogamous and homogamous marriages/partnerships (Bisin and Verdier 2000). These compositional differences might explain an important share of the observed immigrant differentials in FLFP among married or partnered women.

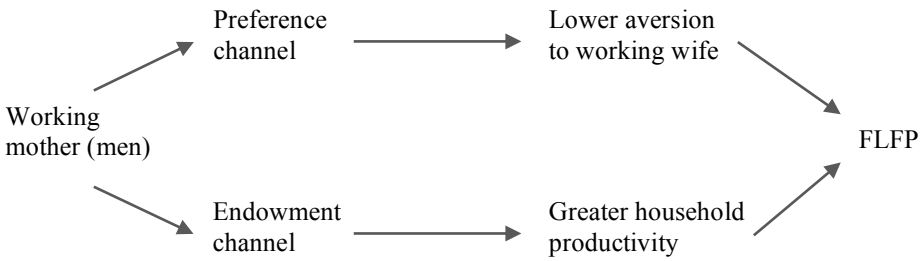
*The working mother-in-law effect*

As already pointed out, there is a growing interest in the intergenerational transmission of attitudes and social behaviour. Economists such as Fernández et al. (2002, 2004) defend the idea that among married and partnered women there is an association (or even a causal link) between their mother-in-law's work status and their LFP. Men often marry women who are similar to their mothers, and therefore those women who are married or partnered to a man whose mother participated in the labour force when he was growing up, are also more likely to participate. This association works under the logic of a 'propagation mechanism' which defends the idea that a larger proportion of men with working mothers in one generation (i.e. a 'new type of man') results in higher incentives for women to participate and invest in labour market skills in the following generation increasing in this way the female labour supply over time.

By considering the work status of the mother-in-law when the partner/spouse was growing up, we are able to introduce family background characteristics that account for the

attitudes of the partner/spouse towards the participation of his wife/partner in the labour force (Del Boca et al. 2000). The behaviour of the mother in the labour market is associated with her son's preferences in the marriage market (Black and Devereux 2010). This effect works basically through two mechanisms: preference and endowment. Thus, either men's gender-related preferences/attitudes are shaped by the fact that they had a working mother, and therefore they are less averse to marrying or partnering a wife who is more likely to work ex-ante or ex post; or men with working mothers have different household skills and behaviour than men with non-working mothers, which ex-ante or ex post attract women in paid employment (see *graph 4.6*).

*Graph 4.6 Channels to increasing FLFP*



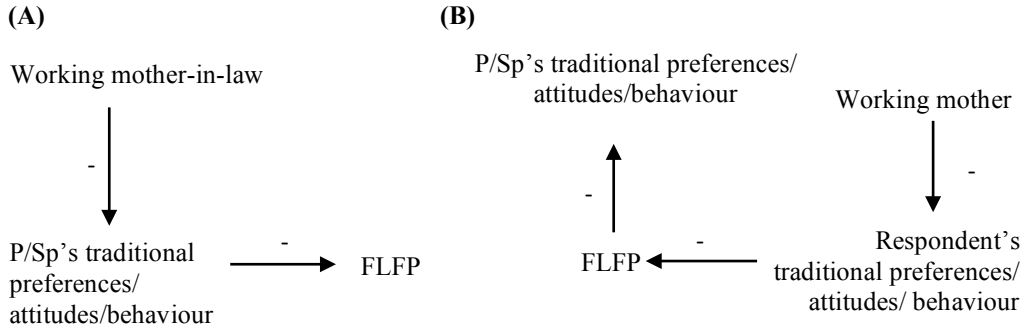

Source: Adapted by the author from Fernández et al. (2004).

To identify the mother-in-law effect on FLFP we must rule out alternative explanations potentially driving this association such as the background characteristics of both members of the couple. One driver of the correlation between mother-in-law's work status and respondent's participation could be the working behaviour of the respondent's mother, indicating a network effect. Fernández et al. (2004) conclude that the work status of the mother of the wife/female partner is no longer significant in explaining her own LFP once we take into account the work status of the mother-in-law. To test the working mother-in-law effect properly, one should also discard the existence of a positive selection effect into marriage of men whose mother worked. Moreover, to respond to the common critique of the weakening effect over time of origin influences, Fernández et al. (2004) also show that the correlation between the working behaviour of wives/partners and their mother-in-law's has actually increased over time across cohorts in the US.

Morrill and Morrill (2013) argue that all the arguments supporting the idea that men with working mothers prefer working partners/spouses could be reversed by arguing that

women themselves may prefer a man whose mother worked, matching with his preferences, attitudes, and behaviour. These authors argue that there is a direct positive effect of working mothers on the labour-force participation of their daughters, and that this might be also explaining the matching with men with working mothers at origin. Through this other path of association, the possibility that we observe a working mother-in-law effect on FLFP is however still possible, as it ultimately reflects the same process but in the inverse order (see *graph 4.7*).

*Graph 4.7 Mother-in-law hypothesis (patterns of association)*




Source: Adapted from the author from Fernández et al. (2002, 2004).

Decision making in couples on LFP does not depend only on necessity. Thus, some authors argue that decisions on participation of women partnered/married with an unemployed partner/spouse might be more dependent on the family background of the members of the couple —i.e. a long family tradition of maternal non-participation— than on the financial necessity of the household (Del Boca et al. 2000). Due to the common pattern of assortative mating in education for example, partner/spouse's characteristics might not provide complementary insights in explaining FLFP unless we interact them with attitudinal variables on participation (Del Boca et al. 2000).

The role a working mother-in-law plays in explaining FLFP has not been considered in the migration literature, despite significant variation across and within ethnic origin and migration status in this regard. Moreover, it allows us to address issues of endogeneity in the relationship between attitudes and FLFP. The 'propagation mechanism' described above has unfolded at a different pace across different societies, compromising the presence, at origin and destination, of the 'new type of man' described above. Men from particular groups are more likely to have grown-up in a family in which the mother did not have a paid employment; while,

other men with different ethnic origins are part of a longer history of female participation —e.g. Jamaicans. Moreover, for married and partnered women of different groups, the mother-in-law effect might be stronger/weaker compared to native due to compositional differences in related factors such as educational attainment and/or normative beliefs towards GRA.

*Partner/spouse's characteristics*

Partner/spouse's GRA and behaviour, as well as labour market resources —e.g. education, employment status, and income—, are likely to affect FLFP. In this chapter I focus on the former, and test the extent to which these two variables mediate the association between mother-in-law's and daughter-in-law's work statuses. I do not address specifically however the role of partners' labour market resources on FLFP.

Partner/spouse's GRA are expected to have an additive effect on top of labour market resources, but also to interact with both women's GRA and labour market resources. In terms of ethnic group differences, all else equal, women from particular ethnic-origin groups might be more/less dependent on their p/sp' GRA/behaviour and labour market resources than native. On this point for instance, some findings for the Netherlands suggest that while second generation Muslim women become more egalitarian with regards to the sexual division of labour in society, men remain over-represented in more conservative positions (Maliepaard and Alba 2016). According to the authors this is mainly driven by lower educational attainment and ethnic closure.

The role partner/spouse's labour market resources play in FLFP, and especially under which circumstances these are more or less salient, are debated issues in the literature (Verbakel and Graaf 2009). We can identify two divergent theories with opposing mechanisms on partner effects: 'New Home Economics' and 'Social Capital' theories (Becker 1991; Bernardi 1999; Bernasco, De Graaf, and Ultee 1998; Lin, Vaughn, and Ensel 1981). While predominant interpretations of the household specialization theory defend the idea that higher partner/spouse's labour market resources are likely to reduce FLFP by decreasing the financial incentives of the other member of the couple and increasing the family/household utility function f(U) (i.e. negative partner effects); social capital theory argues that we might find the opposite effect. Thus, the latter foresees a spill-over effect from the labour market 'success' of the partner/spouse to the labour market situation of the respondent (i.e. positive partner effects). Existing evidence suggests that a negative partner effect is more often found for labour-force

participation and employment, while a positive effect is more likely to be the case for occupational attainment (Verbakel and Graaf 2009).

Bernardi (1999) concludes for Italy that while economic theory accounts for women's LFP decisions, the sociological theory of social capital does so for the predicted outcomes in the labour market. Regarding participation, as the same author argues, the effect is however non-linear —only significant at upper stratification levels—, and contrasted by wife's own labour market resources. Thus, it only holds in couples in which the partner/husband has a clear comparative advantage in the labour market compared to his partner/wife (Bernardi 1999:298; Blossfeld and Drobnič 2001).

Del Boca et al. (2000) expand this discussion arguing that in a situation in which the partner/spouse is, or becomes, unemployed we might encounter two different effects: 'added' and 'discouraged' worker effects. The former refers to the idea that women might increase their participation in the labour force to keep the same level of income in the household, while the latter argues that women with an unemployed partner/spouse might participate less due to a discouragement effect fostered by the hardship in finding a job experienced by the partner/spouse[57].

### 4.3 Analytical strategy

*Data and sample*

I use pooled data from the 2nd and 4th waves of the nationally representative household panel study *Understanding Society*, as questions on GRA are part of a rotating self-completion module only asked in these two waves. I specify robust standard errors to correct for individual clustering in the data, and I use non-response weights to correct for missing cases resulting from the self-completion nature of the rotating module. The total pooled sample is composed by native, and first and second generation immigrant women aged 16 to 64. I exclude female respondents who are either in full-time education, disabled/sick, or in early retirement. The remaining sample for the analyses consists of 15,745 observations from six ethnic-origin groups, plus natives[58]. In the second part of the analyses, to test for the working mother-in-law

[57] In the empirical part of this chapter I concentrate on the effects of p/sp's GRA and hours spent in housework on FLFP. I test the role of p/sp's labour market resources elsewhere (Arcarons 2016).

[58] The final sample consists of 4,303 observations of immigrant women from six different countries of origin: 1,326 Ireland, 862 India, 637 Pakistan, 323 Bangladesh, 563 Africa, and 592 Jamaica.

effect, I restrict the sample by only considering female respondents living with their partners/spouses with non-missing information on the latter. With these constraints, the sample size reduces to 6,618 observations.

*Variables*

I operationalise the dependent variable in two different ways: a binary specification which takes the value of 1 if the respondent participates in the labour force and 0 otherwise[59], and a count measure of the number of hours normally worked per week. I treat the latter as a continuous[60] variable, although I also run robustness checks with a three-category version —i.e. (1) no work or marginal, (2) part-time, and (3) full-time. The operationalization of LFP in different ways increases both theoretical and statistical robustness. It is informative substantively because, as discussed in the theoretical part[61], accounting for the number of hours worked per week across women from different ethnic-origin groups provides a more fine-grained understanding of differences in labour-force participation.

Explanatory variables can be classified into four main interrelated blocks according to the theoretical discussion above: (1) intergenerational transmission of inactivity, (2) human capital and household specialization, (3) cultural theories, and (4) partner/spouse's characteristics, attitudes and behaviour[62].

To operationalise the intergenerational transmission of housewifery/inactivity I use a binary variable differentiating between a working (with a value of 1) and a non-working mother (0) at age 14. For married/partnered women, I define the work status of the mother of their partner/spouse (i.e. the mother-in-law) in the same way.

As a measure of human capital, I transform respondents' highest educational qualifications (categorical) into years of education by taking into consideration the characteristics of the educational systems in origin countries. As suggested by Khoudja and Platt (2016), it is important to increase measurement reliability by keeping education comparable across the ethnic-origin groups being compared. Thus, first generation immigrants

[59] Except for women on maternity leave, who are counted as active.
[60] In their study Khoudja and Fleischmann (2015b) use an interval measure of job hours instead of continuous due to the way the data they use is collected.
[61] I only report here results for the binary dependent variable.
[62] This last block only applies to married/partnered women.

obtain their education in different educational systems, and consequently predefined categories of educational attainment might not mean the same.

To test specialization theory, family structure and household characteristics are operationalized using the variables partnership, and number and age of children in the household. The variable partnership is binary, and takes the value of 1 when the respondent either lives or cohabitates with her spouse/partner, and 0 otherwise. I also use a binary variable to identify whether the respondent is responsible for children below age five. Number of children is instead a count variable, and takes a value of 0 when women do not have children, and greater than 0 if they do. The maximum category includes four or more children, as very few observations in the sample are above four. Based on these variables, in the models I include a categorical variable of four categories (single, no children; single, children; partner, no children; partner, children) to account for family structure, and the variables number and age of children to define more specific characteristics of the household composition.

As discussed in the theoretical part, I expect GRA to be one of the main factors mediating the relationship between mother/mother-in-law's work status and FLFP. Moreover, I also expect GRA to account for differences in female participation across ethnic-origin groups. I measure GRA directly. The *Understanding Society*'s questionnaire asks respondents about their personal views on different dimensions of the division of gender roles in the family and in society more generally. Questions on GRA ask respondents to position themselves with respect to different statements in a common scale that ranges from 1 'strongly agree' to 5 'strongly disagree'. A factor analysis and a Cronbach test with all five available indicators of GRA in the questionnaire does not validate however their combination in a common index, and therefore I use a three-indicators solution[63]. These indicators are: 'pre-school child suffers if mother works', 'family suffers if mother works full-time', and 'husband should earn, wife should stay at home'. I recode them to assign higher values to more traditional attitudes towards gender roles. These three indicators are representative of two general groups of categories often identified in the literature: 'working women and relationship quality' —depicting private beliefs on family arrangements— and 'primacy of the breadwinner role' —depicting a more general view on equal gender rights in society (Davis and Greenstein 2009:89; Röder 2014). The GRA' variable is operationalized in the same way for female respondents and, in the second part of the analysis, their respective partners/spouses.

[63] Results of the factor analysis (together with their correspondent scree plot) and the Cronbach alpha test can be consulted in *tables A4.1, A4.2,* and *A4.3,* and *graph A4.1* in the appendix of this chapter.

Religiosity is measured by means of an ordinal variable that ranges from 1 'no difference' to 4 'a great difference' depending on respondents' level of identification with the statement 'Religion makes a difference to life'. As with gender roles attitudes, higher values equal to more religiosity.

In the second part of the analyses, the variable partner/spouse's 'hours per week on housework' complements p/sp's GRA by adding a behavioural component, which is not always aligned with attitudes. This variable serves as an indicator for the endowment channel described by Fernández et al. (2004), and schematized in *graph 4.6* above. The variable is continuous with a minimum of 0 hours of housework and a maximum of 20 (or more)[64].

As control variables, I include a dummy for migration status, i.e. first generation vs. native and second generation immigrant women (reference category)[65]; age and age squared; self-reported health status (ordinal, ranging from 1 'excellent' to 5 'poor health'); and region dummies —with London as the reference category— to pick up regional variation in labour demand and market conditions more generally. This last variable is dichotomized in the second part of the analyses, due to the reduction in the number of cases in the sample of married/partnered women, taking London the value of 1 and the rest of the regions the value of 0.

*Model specifications and methods*

The overall goals of the empirical analyses are to first identify whether there are mother and mother-in-law effects on FLFP, and then quantify them. Second, to test the role of possible mediator and moderator variables in this association and spell out the mechanisms. And third, to report how these variables contribute in explaining ethnic and migration penalties and premiums as well as within-group variation in participation, and test whether they work differently across ethnic-origin groups and immigrant generations by means of modelling interaction terms. To model the dependent variable LFP I estimate both logistic regression and linear probability models, and report results based on the latter. I also model the other dependent

[64] I set the maximum to 20 hours of housework, i.e. including the cases with a higher number of hours in this category, as more than 95% of the cases contribute up to 20 hours. In this way, I also prevent the average to be affected by outliers.

[65] I also use migration status as a key predictor in some parts of the analyses. When ethnic origin is in the model, and migration status is used as a control, I collapse the latter into two categories: first and second generation and native women (reference category) (see Khoudja and Fleischmann 2015).

variable, usual or average work hours per week (including 0), as a continuous one using OLS regression, although I do not report the results.

## 4.4 Results: the working mother effect and the role of individual-level characteristics

*Ethnic and immigrant differences in FLFP and its main predictors*

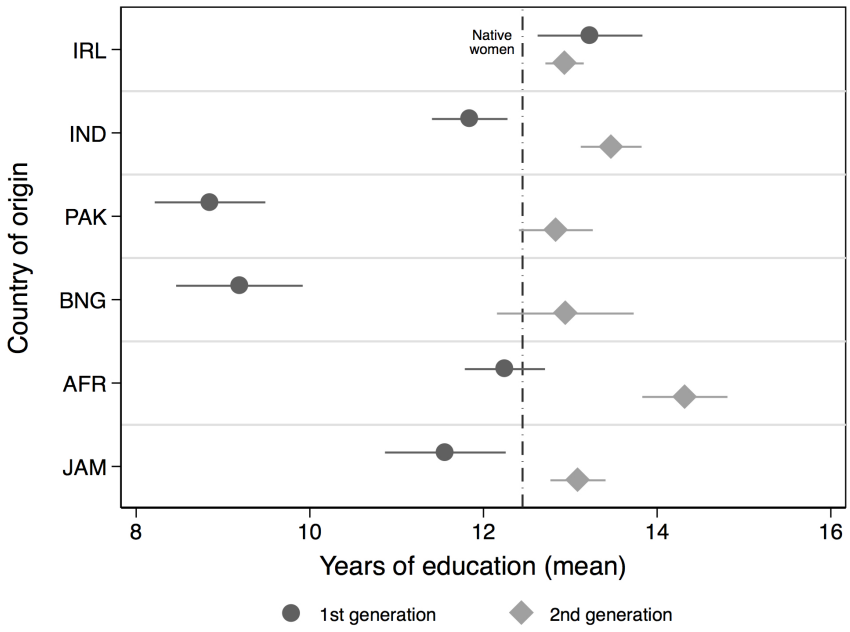
Women with different ethnic origins have, a priori, different patterns of LFP. *Prtests* comparing the percentage of active women in each ethnic-origin group to that of native confirm the existence of statistically significant penalties in participation for Pakistani, Bangladeshi, Indian, and African women —with the penalty for African being however negligible in size. On the contrary, Jamaican and Irish have similar or even higher levels of participation than native women. If we define instead LFP in terms of the average number of hours worked per week, we observe a similar pattern, with Pakistani and Bangladeshi women participating the least —i.e. about 10 hours per week on average—, and Jamaican, Irish, and native the most, with about 23 hours on average per week (see *table A4.4* in the appendix).

In the theoretical part I have defended that the work status of the mother when growing up is likely to be an important predictor of FLFP. This variable has been seldom used in migration research to explain ethnic stratification in FLFP. However, among all the predictors considered, I find between-group variation in this regard to be one of the largest. All immigrant women, except Jamaican, are less likely than native to have had a working mother when growing up. This is particularly true for Pakistani and Bangladeshi women. For every five native women with a working mother there is only one Pakistani, and for almost every ten native, only one Bangladeshi. Indian and African women are also less likely than native to have had a working mother at the age of 14, although to a lesser extent. On the contrary, Jamaican women are more likely than native to come from a household in which the mother worked, while the negative difference for Irish women is negligible compared to the rest of the groups.

I have also argued that educational achievement and GRA play an important role in the intergenerational transmission of inactivity. Human capital theory, argues that investment in education is proportional to labour-force participation. As shown in *table A4.4* in the appendix, Pakistani and Bangladeshi women have on average two years less of education than native. However, as reported in many other studies for the UK, once we condition educational attainment on migration status, second generation Pakistani and Bangladeshi women are no longer disadvantaged (see *graph 4.8,* the dashed line represents the average years of education

of native women). Thus, education disadvantage for women in these two groups is experienced mostly in the first generation. Women in the rest of the groups are instead similarly educated than native already in the first generation —i.e. they are more positively selected—, and significantly more educated in the second, especially African.

*Graph 4.8 Average years of education by migration status over ethnic origin*



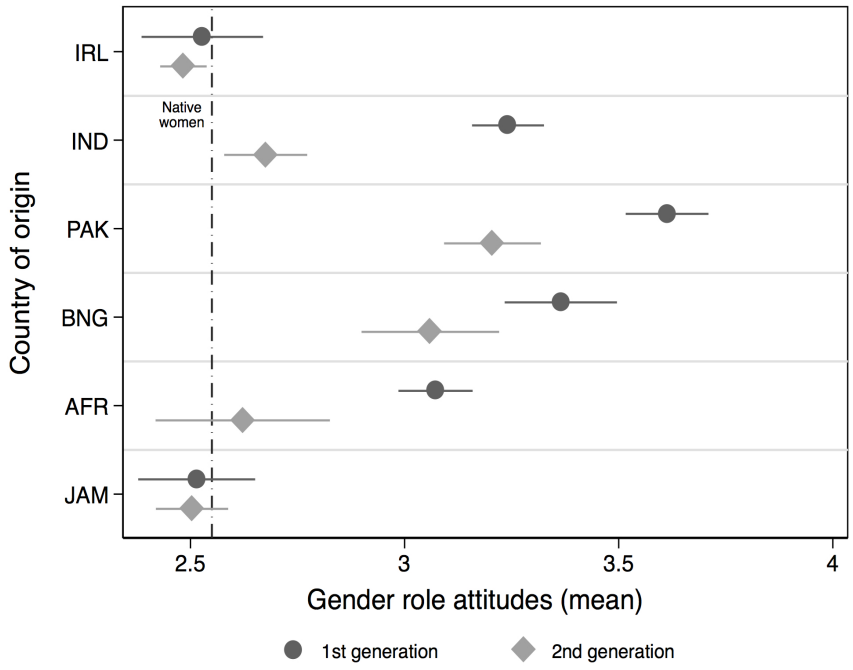

Source: *Understanding Society*, waves 2 and 4, author's analysis.

Family structure, another important correlate of FLFP, also varies significantly across groups. Women with Bangladeshi, Pakistani, and Indian origins are more likely to be married/partnered. Moreover, they are also over-represented among married/partnered women with children, as over 80% of Pakistani and Bangladeshi married/partnered women are mothers. On the other hand, about two thirds of Jamaican women are single, and one in three Jamaican and African women are single mothers. Among mothers, all immigrant women except Irish have on average more children than native. Moreover, about one third of Pakistani, Bangladeshi and African women have children below age 5, doubling the percentage of native.

In terms of attitudes towards the sexual division of labour in the couple and in society more generally, and based on GRA' scores, all immigrant women, except Irish and Jamaican, are on average more traditional than native. Pakistani and Bangladeshi women are the most traditional, with differences with native women of about one point in a five-point scale. In *graph 4.9* I condition GRA' mean scores on migration status. As for education, differences between

immigrant and native women decrease in the second generation. However, unlike the case of education, significant positive differences persist for Pakistani and Bangladeshi women. Thus, second generation women with Pakistani and Bangladeshi origins are comparatively more traditional than native, but also than women in the rest of the groups —e.g. Indian, who experience a sharp decrease in traditionalism over immigrant generations.

*Graph 4.9 Average gender role attitudes' score by migration status over ethnic origin*

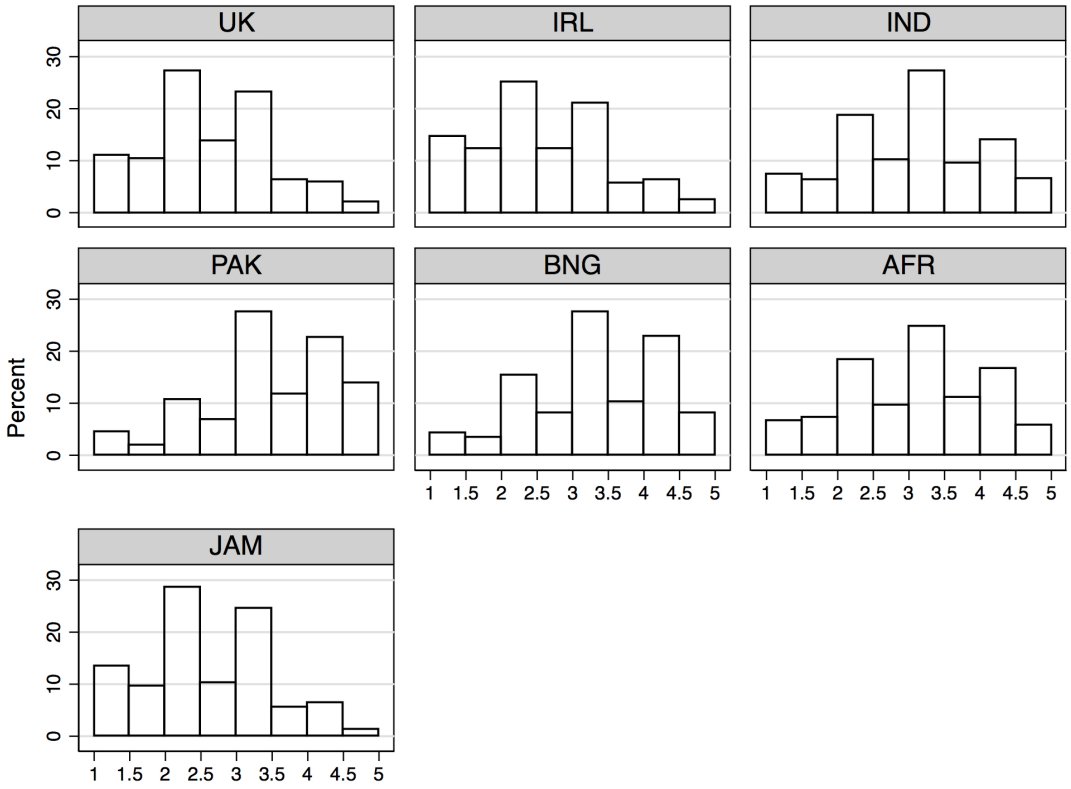



Source: *Understanding Society*, waves 2 and 4, author's analysis.

Within-group variation in GRA informs us the extent to which women with the same ethnic origin differ in their level of traditionalism. The distribution of Pakistani and Bangladeshi women is the most negatively skewed, in contrast with the one of Irish, the most positively skewed, i.e. leaning towards less traditionalism (see *graph 4.10*). Measures of dispersion around the mean show that immigrant women have more dispersion in GRA than native, with Indian and African being the most heterogeneous. This is likely to be due partly to the fact that Indian women come from different cultural and urban/rural backgrounds. In the case of African women, the different countries and regions that compose this category have different historical aggregate developments regarding the role of women in society and the division of labour (e.g. Nigeria *vs.* Ghana). All Immigrant women have on average also higher levels of religiosity than

native. Pakistani and Bangladeshi women are the most highly religious, with an average difference of almost two points with respect to native in a four-point scale measure.

*Graph 4.10 Distribution of gender role attitudes' scores by ethnic origin*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

The pattern of association between the key explanatory variables is as expected. The work status of the mother at age 14 correlates positively with education (r=0.13*)[66] and negatively with GRA (r=-0.18*), religiosity (r=-0.17), and number of children (r=-0.07*) (see *table 4.1*). GRA correlate positively with religiosity (r=0.19*) and number of children (r=0.17*) and negatively with education (r=-0.20*). I run these same correlations by ethnic origin, and find some important differences in the overall pattern of association[67]. If we focus on the main correlations of interest, i.e. those between the work status of the mother and education and GRA, we observe that for Indian and Bangladeshi women the negative correlation between the

[66] (*) means that pairwise correlations are significant at the 1% level.

[67] The full table of correlation results broken-down by ethnic origin can be consulted in *table A4.5* in the appendix of this chapter.

mother's work status and GRA is substantively stronger than for natives. On the other end, the correlation between these two variables is significantly weaker for Jamaican women for example —e.g. four times weaker than for Indian. Moreover, African women have the highest correlation between mother's work status and education (r=0.21*), and Jamaican the lowest (r=0.04*).

*Table 4.1 Pairwise correlations between the main explanatory variables of interest*

| | GRA | Education | Working mother | No. of children | Religiosity |
|---|---|---|---|---|---|
| GRA | 1 | | | | |
| Education | -0.1975* | 1 | | | |
| Working mother | **-0.1773*** | **0.1320*** | 1 | | |
| No. of children | 0.1687* | -0.0259* | -0.0709* | 1 | |
| Religiosity | 0.1889* | 0.0602* | -0.1699* | 0.0928* | 1 |

Source: *Understanding Society*, waves 2 and 4, author's analysis.

Ethnic-origin variation across migration status and age is also key to understand FLFP. As reported in *graph 4.2* in the introduction, activity rates increase substantively in the second generation. This is especially the case for groups with comparatively low FLFP in the first generation, namely Pakistanis, Bangladeshis and Indians. On one hand, a clear majority of Jamaican and Irish women belong to the second generation. On the other, more than 80% of African women belong to the first. For Indian, Pakistani, and Bangladeshi women the migration status ratio is instead more evenly split. In terms of age, compared to native women, Irish and Jamaican have a similar average age, while women from the rest of the groups are, as one would expect based on their timing of arrival to the country, significantly younger.

Differences in the geographical distribution are also likely to affect participation opportunities and condition decisions. As often reported in the literature, all immigrant women in the sample are, in comparison to native, both highly dispersed territorially and more likely to concentrate in urban areas. With about 60% of the observations, Bangladeshi, African and Jamaican women are mostly concentrated in the metropolitan area of London. This is also true, although to a lesser extent, for Indian women, also present in East and West Midlands, Yorkshire and South East. About two thirds of Pakistani women concentrate instead in the areas of West Midlands, Yorkshire, and North West. Irish women, in comparison to other groups, are more evenly spread in the territory. Finally, ethnic differences in subjective health status are

not substantive, with average values between the categories 'good' and 'very good' across groups[68].

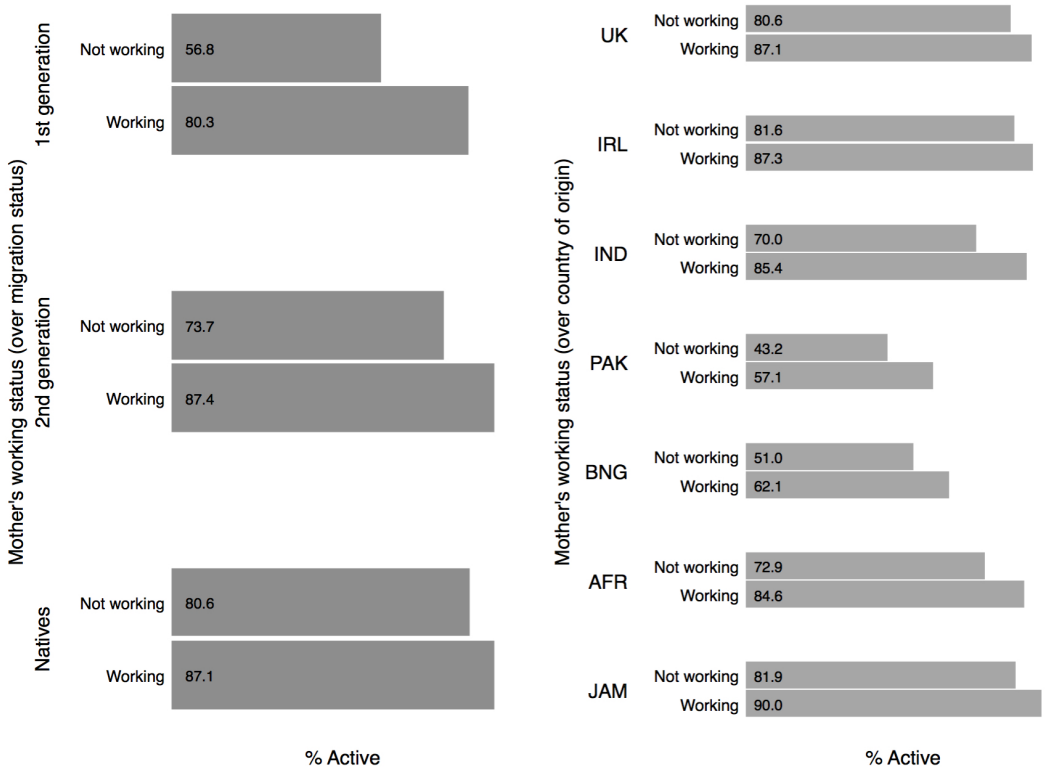
In sum, based on the descriptive statistics and the correlation patterns among the main predictors of FLFP discussed so far —and reported in detail in *table A4.4* in the appendix—, we observe that Pakistani and Bangladeshi women are the most disadvantaged groups. For these two groups, significant improvements are observed however over immigrant generations in terms of educational attainment, although significant differences in GRA persist. Moreover, it is worth emphasizing that the difference between women from Pakistani and Bangladeshi origins and native in the main explanatory variable of interest, namely the work status of the mother when growing up, is one of the largest among all correlates.

*The intergenerational transmission of inactivity: the working mother effect*

One of the central hypotheses being tested in this chapter is whether women with a working mother when growing up are more likely to participate in the labour force than women with a non-working mother, and the extent to which this contributes in explaining ethnic stratification in participation. Before moving to multivariate analyses, we observe that indeed, at the descriptive level, women with a working mother, either immigrant or native, participate substantively more (see *graph 4.11*). To the extent that this is true varies however across migration status and ethnic origin. The largest differences in the percentage of active women conditional on the work status of the mother are for the first generation, and reduce gradually for second generation and native women. Across groups, Indian, Pakistani, African, and Bangladeshi women show, respectively, the largest differences —i.e. with participation being 10 to 15 percentage points higher for women with a working mother in these four groups.

[68] Disabled women, as well as women with long term illnesses, are excluded from the sample.

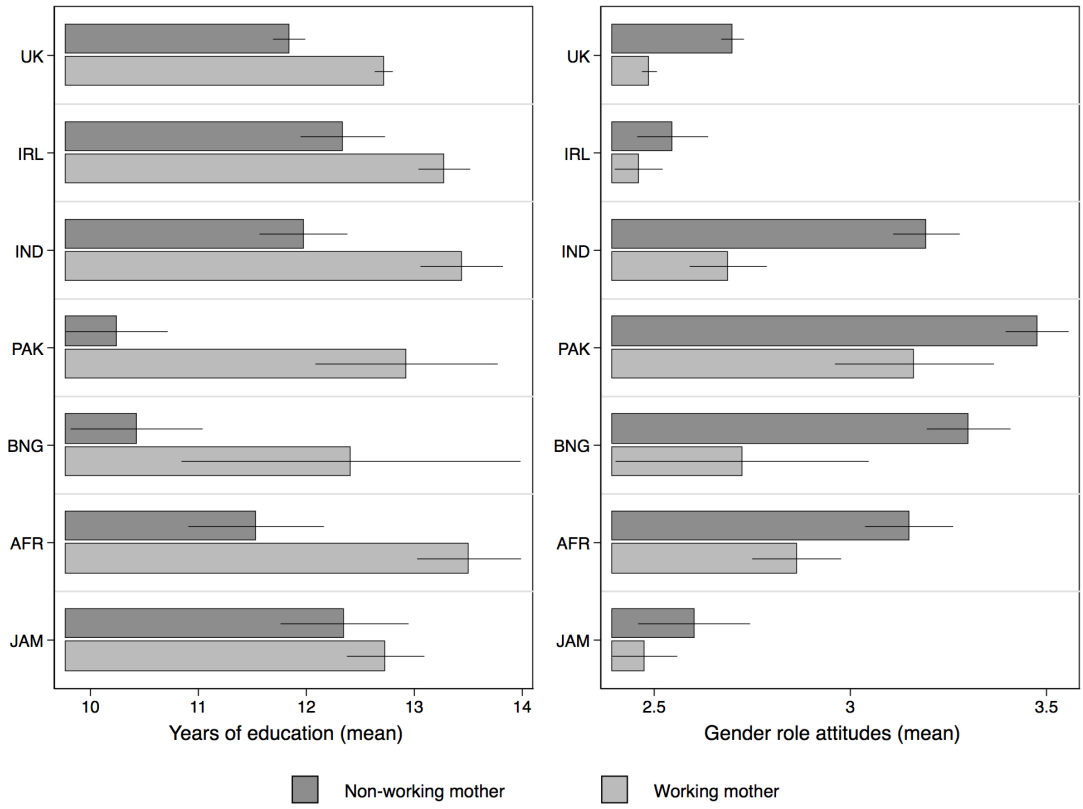
*Graph 4.11 Percentage of active women by mother's work status over ethnic origin and migration status*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

According to the discussion in the theoretical part of this chapter, two variables that are likely to channel the effect of mother's work status on FLFP are education and GRA. Still at the descriptive level, *graph 4.12* shows that across all ethnic-origin groups women with a working mother spend on average more years in education, and at the same time hold less traditional attitudes towards the sexual division of labour compared to women with a non-working mother. For both variables, the largest mean differences are for Indian, Pakistani, Bangladeshi and African women.

*Graph 4.12 Average years of education and gender role attitudes' scores by mother's work status over ethnic origin*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

Multivariate results from linear probability models confirm that having a working mother when growing up increases women's probability of participating in the labour force in adulthood by 8.4 percentage points (see *table A4.6* in the appendix). Different factors are however likely to mediate this association. Once we include GRA in the model for instance, the working mother coefficient decreases by 2.5 percentage points. If we include instead years of education, it reduces by 1.3 percentage points; and with both correlates in the model, the working mother coefficient reduces from 8.4 to 5.1 percent. Thus, about 40% of the working mother effect is explained by education and GRA. Moreover, with the addition of variables depicting family structure the working mother coefficient reduces further to 3.6 percent.

Having a working mother when growing up is therefore associated with a non-negligible higher probability of participating in the labour force. This association is however mediated to a large extent by women's GRA, education, and family-related decisions. Thus, women coming from a household with a non-working mother are more likely to hold more traditional attitudes

towards the sexual division of labour, acquire less education, and take consequently different family-related decisions, factors that ultimately explain most of the initial association observed. The indirect effect of having a working mother on FLFP is therefore stronger than its direct effect.

*Mother's work status and immigrant disadvantage in FLFP*

So far, I have provided evidence showing that immigrant women are more likely to grow up in a household with a non-working mother —especially Pakistani and Bangladeshi—, and supporting the idea that having a working mother is associated with a higher LFP.

Building on the baseline model in the previous sub-section, I add ethnic origin in order to allow for the intercepts to differ across groups. *Graph 4.13* depicts differences in the average adjusted probability (AAP) of being active between immigrant (by ethnic origin) and native women with and without a working mother at the age of 14[69]. As the distance between the intercepts indicates, Bangladeshi and Pakistani women have a clear participation penalty with respect to native. This model specification assumes however that the effect, i.e. slope, of the mother's work status behaves in the same way across groups. Thus, differences in participation between immigrant and native women are assumed to remain constant over the values of the variable mother's work status[70].

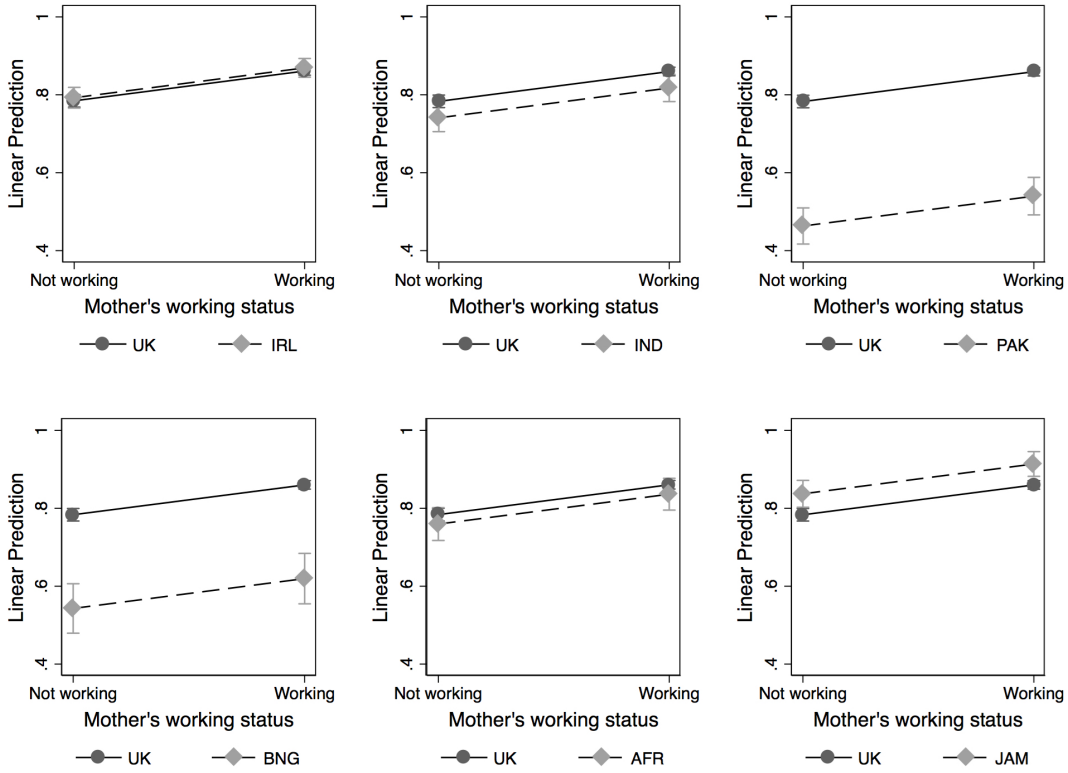
The interaction between ethnic origin and mother's work status shows that differences between immigrant and native women in the effect, i.e. slope, of mother's work status are not statistically significant for most groups. The interaction is only significant for Indian women, for whom the positive effect of having a working mother on LFP is stronger than for native[71]. Despite not being statistically significant, participation gaps with respect to native women reduce however among women with a working mother for other groups too. This is especially true for Pakistani and Bangladeshi women, with steeper slopes than natives.

[69] For the estimation of the AAPs control variables are held at their means.

[70] Lines between immigrant and native women are not completely parallel as I use logistic models, which are interactive in their formulation, to estimate the probabilities.

[71] Interaction results are not reported but are available upon request.

*Graph 4.13 Average Adjusted Probabilities (AAP) of LFP by mother's work status. Differences between native and immigrant women over ethnic origin (different intercepts).*



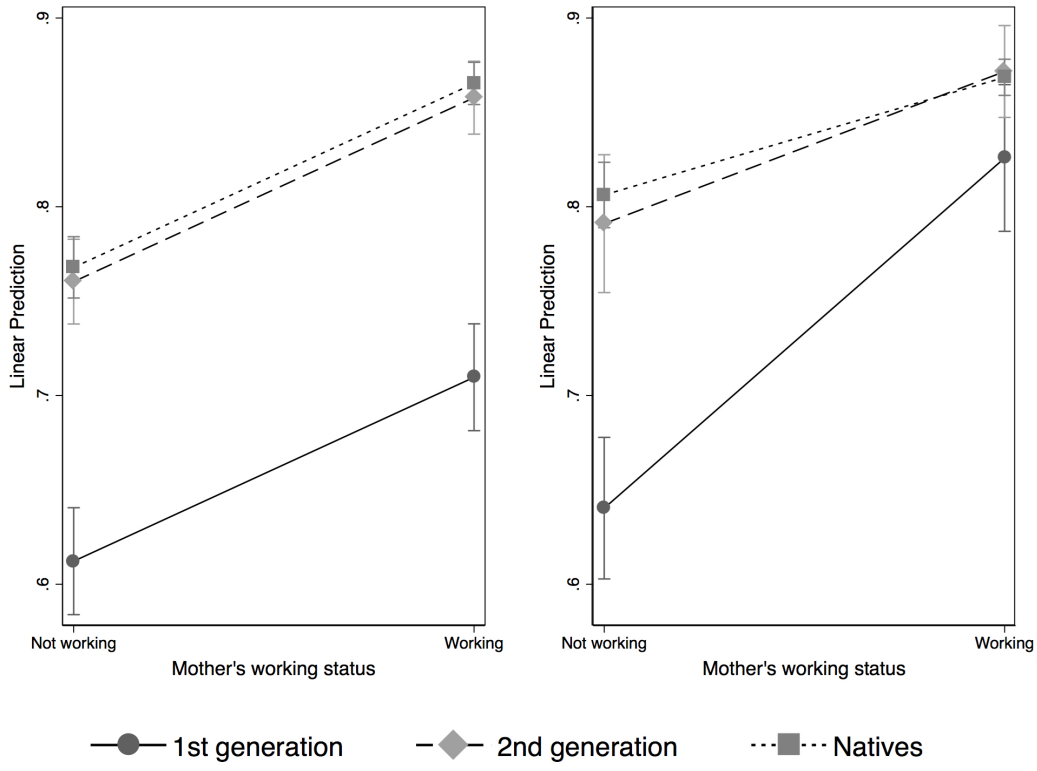

Source: *Understanding Society*, waves 2 and 4, author's analysis.

As intuited in the descriptive results above, migration status seems to explain a large part of the observed ethnic penalties in FLFP. By adding it into the model, ethnic penalties in LFP reduce substantively as shown in *graph A4.2* in the appendix. We should also consider the possibility that in fact the strength of the working mother effect on LFP differs more by migration status than ethnic origin. First generation women are likely to face higher barriers to LFP than second generation and native women, independently of their ethnic origin, and mainly due to the disruptive process of migration. Moreover, these barriers are likely to be greater for women with comparatively more traditional GRA and low education. Factors that are associated, as we have seen, with the work status of the mother when growing up. First generation immigrant women are more exposed than the second generation to attitudes and behaviour towards the division of gender roles in their respective countries of origin.

*Graph 4.14* shows both immigrant differences in FLFP (first sub-graph), and the interaction between mother's work status and migration status (second sub-graph). In this case, unlike for most of the ethnic origin categories, the interaction is statistically significant. If we

compare the two sub-graphs we observe that the participation penalty of the first generation, above 15 percentage points, with respect to both native and the second generation is offset by the fact that the respondent had a working mother when growing up. First generation immigrant women benefit then more, in terms of labour-force participation, from having a working mother at a young age than native or second generation women do.

*Graph 4.14 Average Adjusted Probabilities (AAP) of LFP by mother's work status. Differences between native and immigrant women over migration status.*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

In sum, results confirm the hypothesis that there is an association between the mother's work status and daughter's LFP. Penalties in this regard are higher for women with a non-working mother, behaving the working mother effect similarly across women from different ethnic-origin groups. The working mother effect does differ however by migration status. Thus, having a working mother when growing up offsets the difference observed between the first generation and native women with a non-working mother, indicating a stronger effect of this variable for first generation immigrant women.

## 4.5 Results: the working mother-in-law effect and the role of partner/spouse's characteristics

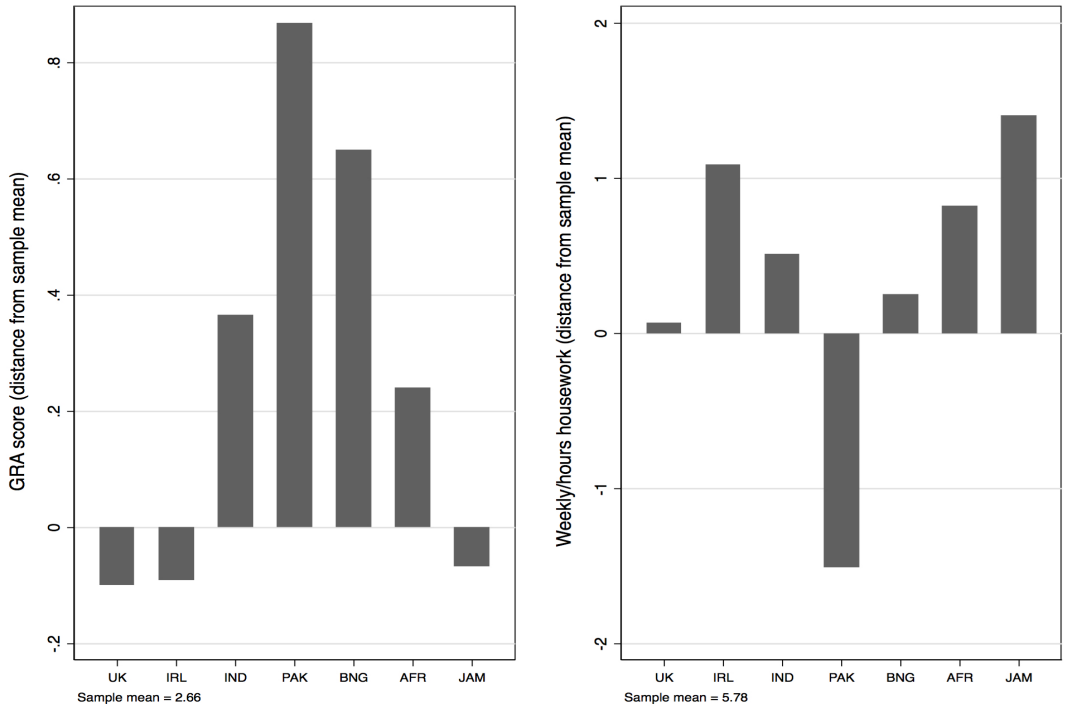
The main aims in this second part of the analyses are, on one hand, to test the effect of the mother-in-law's work status on FLFP, and, on the other, to assess whether it differs by migration status and ethnic origin. Moreover, based on the theory, I analyse the role of potential mediators, and assess whether the working mother-in-law's status affects FLFP on top of women's individual-level characteristics, including the work status of the mother. Analyses are based on a sample of either married or partnered women with non-missing information on partner/spouse's characteristics. In comparison with the whole sample, we might expect married, and to a lower extent partnered, women to comprise a self-selected sample on the dependent and explanatory variables, as marriage/partnership is often a highly gendered institution (Davis and Greenstein 2009; Hakim 2003).

Descriptive evidence shows that inter-group differences in the mother-in-law's work status are marked in the sample. While about two thirds of Jamaican, native, and Irish partners/spouses (i.e. men) come from a household at origin in which the mother used to work, this is true for approximately only one in ten observations in the case of Bangladeshi and Pakistani.

Results also show that partners/spouses hold, on average, more traditional GRA than respondents (i.e. women), and that this is true for all ethnic-origin groups. Partners/spouses of Pakistani and Bangladeshi women are the most traditional, with an average GRA' score one point higher —in a five-point scale— than native, the least traditional as far as attitudes are concerned. Men partnered to Pakistani women also spend the lowest average number of weekly hours of housework, with a difference of more than 2.5 hours —i.e. the equivalent of 10 hours per month— in comparison to men partnered to Jamaican women, the largest contributors to housework. It is worth noting that despite the relative low levels of traditionalism among men partnered to native women, the latter are the ones with the lowest contribution to housework after men partnered to Pakistani women[72]. *Graph 4.15* shows p/sp's differences with respect to the sample mean for GRA and weekly hours of housework —both potential mediators of the relationship between mother-in-law's work status and FLFP— over ethnic origin.

[72] For more detailed results on descriptive statics for the married/partnered sample refer to *table A4.9* in the appendix.

*Graph 4.15 Distances from sample's mean GRA' scores and weekly housework hours by ethnic origin*

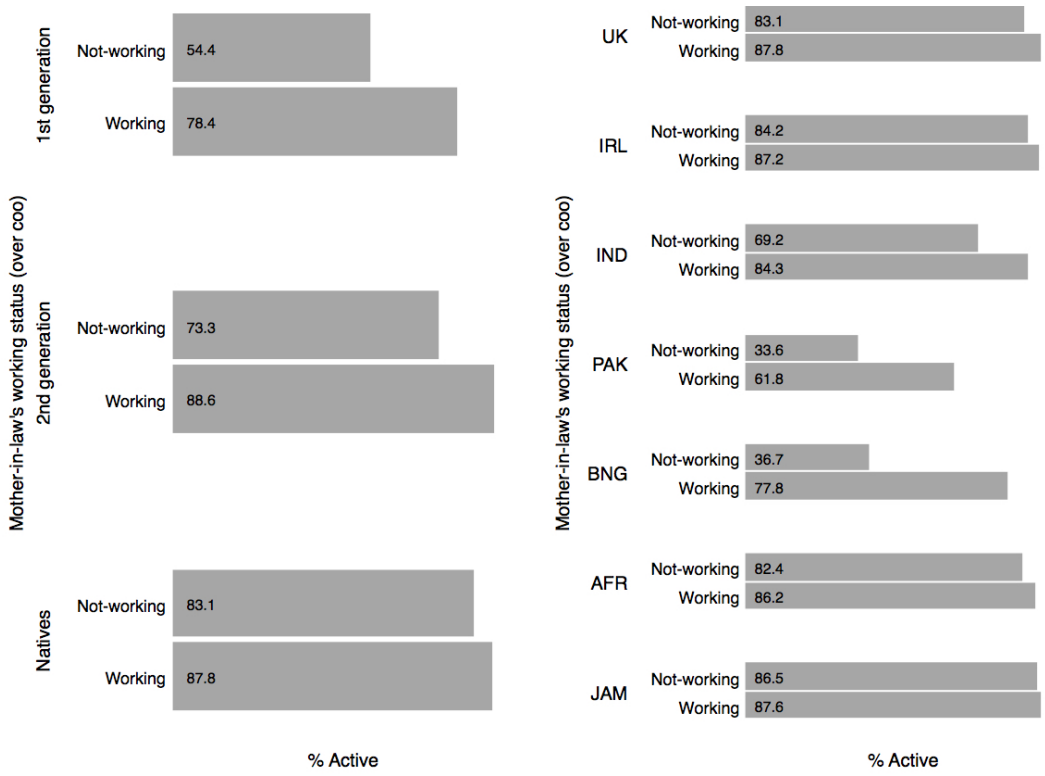



Source: *Understanding Society*, waves 2 and 4, author's analysis.

*The working mother-in-law effect and the role of partner/spouse's characteristics*

The percentage of active women increases across migration status and ethnic origin categories if the partner/spouse's mother worked when he was growing up. In terms of migration status, the mother-in-law participation gap is particularly high for first and second generation immigrant women. Across ethnic origins, Bangladeshi, Pakistani, and Indian women present the largest differences. In the case of Bangladeshi for instance, the percentage of active women among those with a working mother-in-law doubles that of women with a non-working one (see *graph 4.16*).

*Graph 4.16 Percentage of active women by mother-in-law's work status over ethnic origin and migration status*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

I have defended the idea that the association between the mother-in-law's work status and FLFP is likely to be partly driven by both men's preferences towards a working wife (i.e. preference channel) and men's household productivity (i.e. endowment channel). As already mentioned, I operationalise these constructs with two variables measuring partner/spouse's GRA and weekly hours of housework respectively. The correlation matrix between these three variables shows that indeed p/sp's GRA are negatively correlated with the work status of the p/sp's mother —i.e. if the p/sp's mother worked, he holds less traditional attitudes. I do not observe, however, for the whole sample a strong correlation between men's weekly hours of housework and the work status of their mothers —implying that GRA might be the main mediator between the latter and FLFP. Housework correlates instead negatively with GRA (see *table 4.2*).

*Table 4.2 Pairwise correlations between the main explanatory variables of interest*

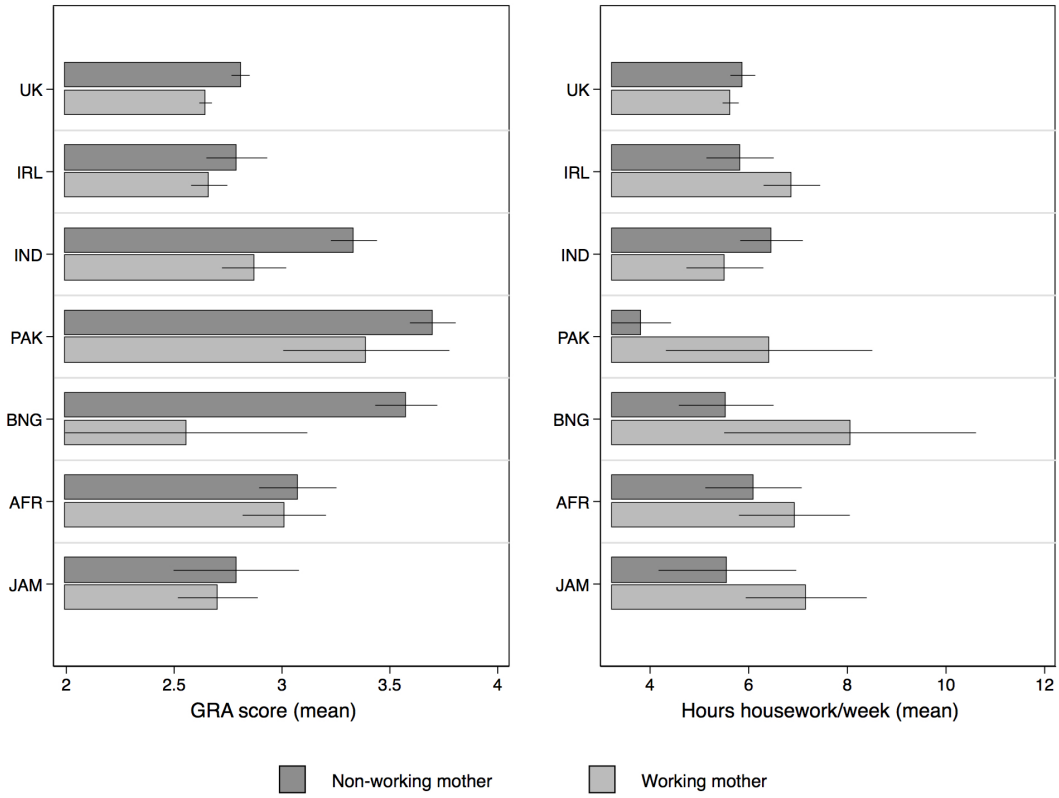
| | P/sp GRA | P/sp housework | Working mother-in-law |
|---|---|---|---|
| P/sp GRA | 1 | | |
| P/sp housework | -0.1162* | 1 | |
| Working mother-in-law | **-0.1748*** | **0.0077** | 1 |

Source: *Understanding Society*, waves 2 and 4, author's analysis.

As before, if we estimate the same correlation matrix by ethnic origin, the magnitude of the correlations (not the sign) differ substantively across groups (see *table A4.10* in the appendix). For example, Bangladeshi women have the highest correlation between mother-in-law's work status and p/sp's GRA, four times higher than that for native women. Pakistani women show instead the highest correlation between mother-in-law's work status and p/sp's weekly hours of housework (r=0.16*). This points to the direction that the endowment channel described in the theoretical part might be also important in increasing FLFP for this group.

In *graph 4.17* I show the average p/sp's GRA and weekly hours of housework conditional on their mother's work status, and compare the differences between the two averages for each ethnic-origin group. Among those with a working mother when growing up, immigrant men (except Indian) are more likely to dedicate more time to housework, although they are significantly more traditional than native (except Bangladeshi). In terms of within-group variation, men partnered to Indian and Bangladeshi women have the largest differences in GRA. Among men partnered to Bangladeshi women for instance, average GRA increase by one point if the mother did not work when growing up. For housework, the largest differences are found instead among men partnered to Pakistani women, as those whose mother worked contribute on average three hours more to housework per week than those whose mother did not work.

*Graph 4.17 Average p/sp's gender role attitudes' scores and weekly hours of housework conditional on mother-in-law's work status over ethnic origin*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

Multivariate results for the whole sample based on linear probability models show that women partnered/married to a man whose mother worked when growing up are almost 10 percentage points more likely to participate in the labour force than women married to a man whose mother did not work. By adding p/sp's GRA in the model, the working mother-in-law effect reduces by about 2 percentage points, indicating a mediating role of the former. Results also show, as already pointed out in the correlation matrix, that overall p/sp's weekly hours of housework do not mediate the association between the work status of the p/sp's mother and FLFP. With both variables in the model, a direct effect of about 7% remains, indicating that other factors might be driving this association.

Before commenting on ethnic differences, I also test whether the working mother-in-law effect predicts LFP on top of women's individual-level characteristics. If the mother-in-law effect does not vanish once the latter are accounted for, we can argue that women's decisions to participate in the labour force are associated with p/sp's characteristics/preferences

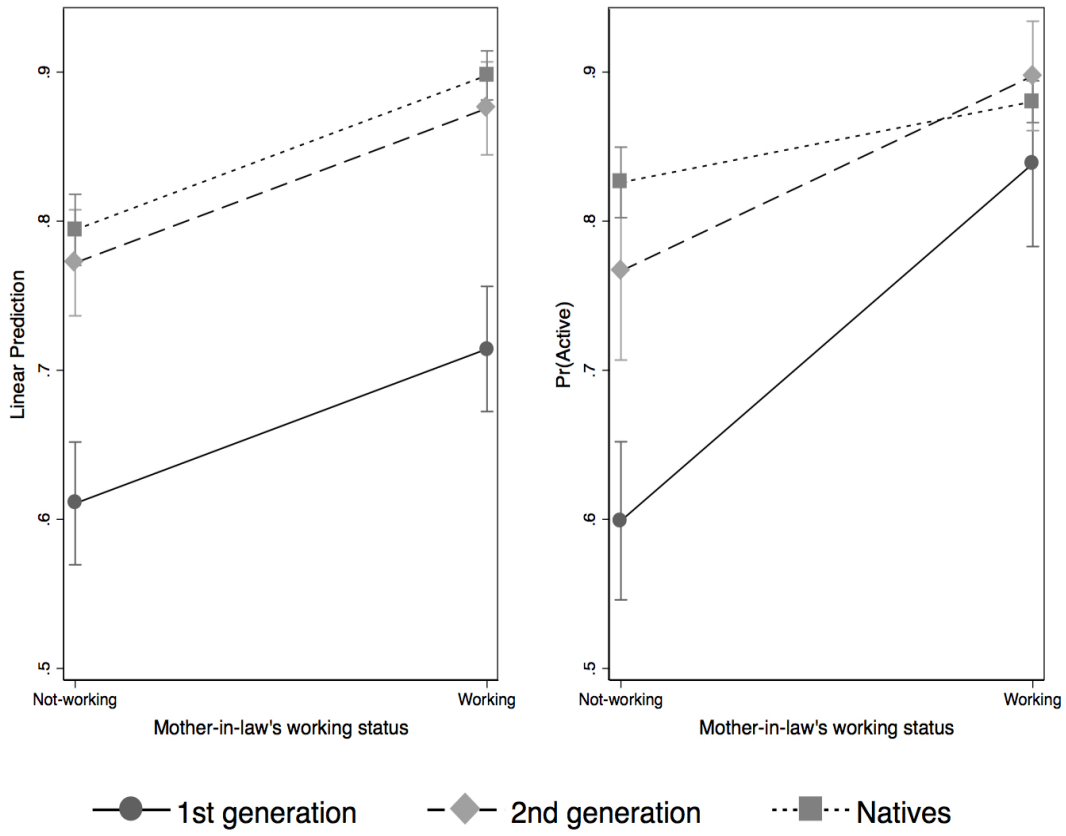
on top of individual-level attributes. A plausible interpretation would be in this case that women's decisions to participate are somehow adaptable to the preferences and characteristics of their partners/spouses.

I start with a model in which I only include the work status of the mother-in-law, and I add the work status of the respondent's mother. Both variables are positively associated with FLFP, with the effect of the former being however larger. With the inclusion of women's individual-level characteristics, as we have already seen, the size of the coefficient for the mother's work status reduces substantively, and is no longer statistically significant at the 95% level. Instead, the working mother-in-law coefficient remains relatively large and statistically significant. This confirms that the work status of the mother-in-law affects, through partner characteristics, women's decisions to participate in the labour force on top of individual-level characteristics.

*Mother-in-law's work status and immigrant disadvantage in FLFP*

As the first sub-graph in *graph 4.18* shows, first generation immigrant women are 18% less likely to participate in the labour force than native, and 16% less likely than second generation women. For the latter, the size of the participation penalty with respect to native is therefore relatively small. In this same sub-graph, the mother-in-law effect is assumed however to work in the same way across immigrant groups, as only group intercepts are allowed to vary. Having a working mother-in-law increases FLFP by about 10 percentage points for all the groups being compared. The second sub-graph shows instead the interaction effect between the mother-in-law's work status and migration status. By modelling the interaction between the two terms, we allow for the working mother-in-law effect to differ across groups. As for the work status of the mother, the interaction is statistically significant. Thus, first generation immigrant women benefit significantly more than native from having a working mother-in-law. In fact, among women with a working mother-in-law, there are no longer immigrant differences in LFP.

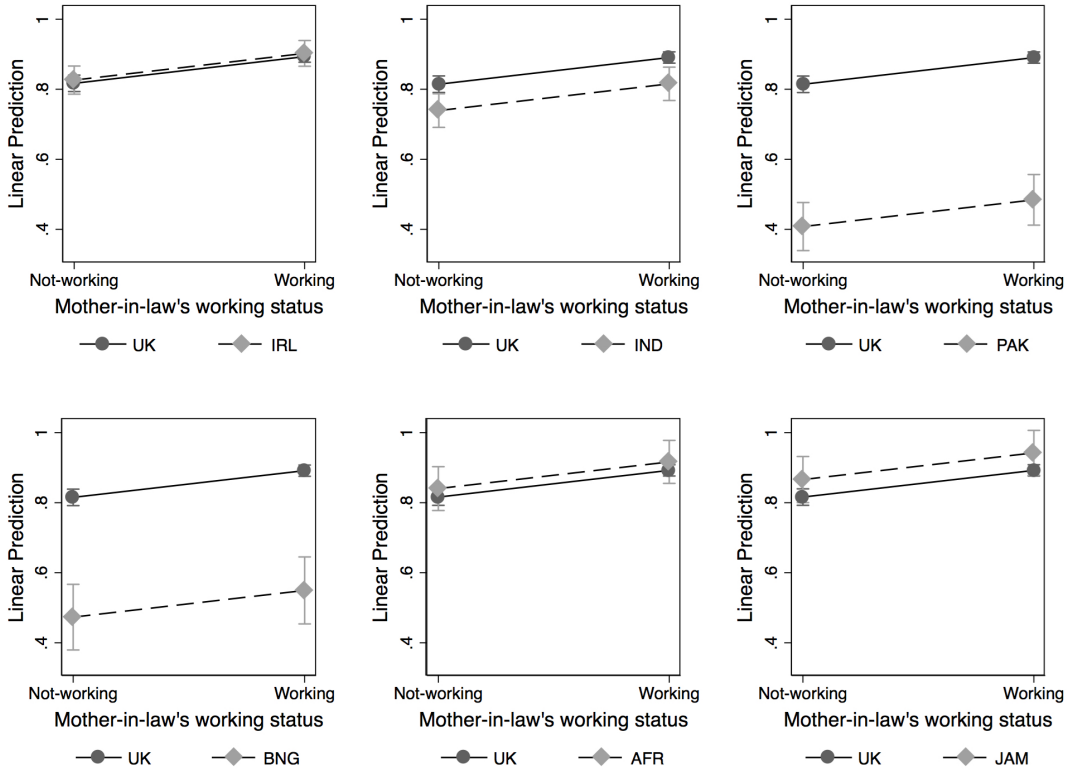
*Graph 4.18 Average Adjusted Probabilities (AAP) of LFP by mother-in-law's work status. Differences between native and immigrant women over migration status*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

Differences in FLFP are however likely to differ further by ethnic origin. *Graph 4.19* below shows a clear participation penalty for Pakistani and Bangladeshi women. Indian women, although to a much lesser extent, are also less likely to participate than native. For the rest of the groups, differences in LFP are negligible. Migration status might partly explain ethnic-origin penalties between women from different ethnic-origin groups and native. Once we include migration status in the model, the penalty for Indian women vanishes, and the penalties for Bangladeshi and Pakistani reduce although they remain sizeable. On the other hand, African women —who mostly belong to the first generation— now have a participation premium with respect to native (see *graph A4.3* in the appendix).

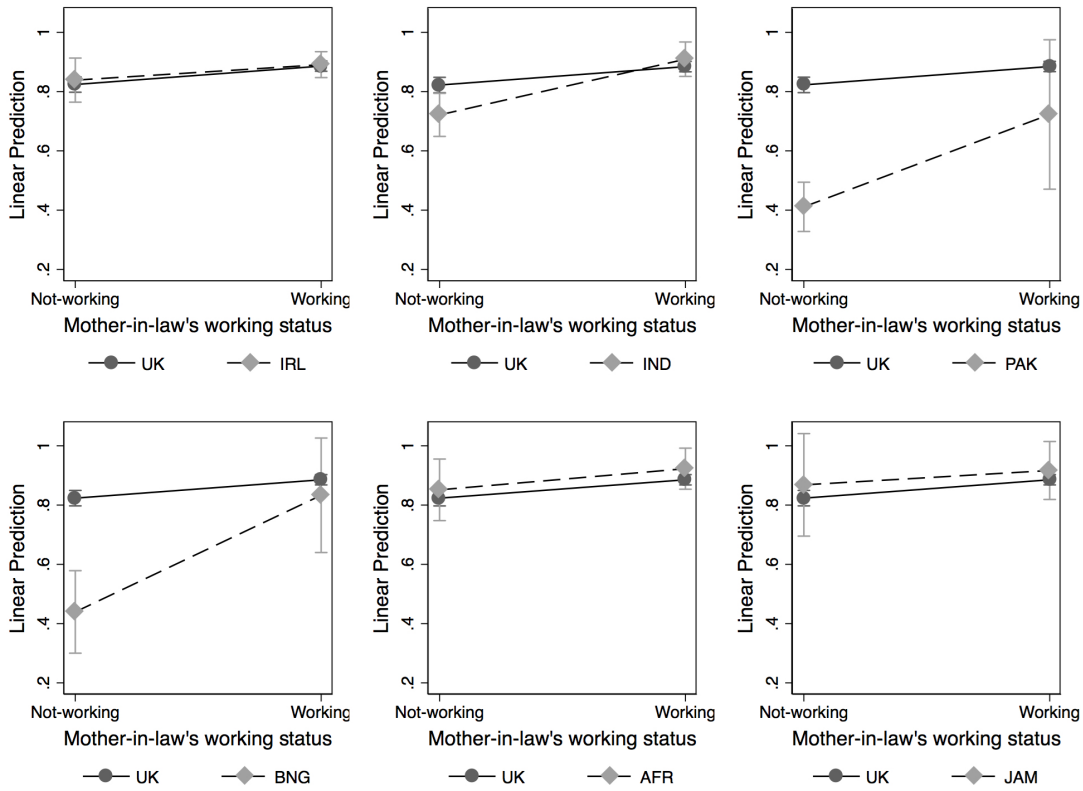
*Graph 4.19 Average Adjusted Probabilities (AAP) of LFP by mother-in-law's work status. Differences between native and immigrant women over ethnic origin (different intercepts)*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

Next, I allow for the working mother-in-law effect to differ across ethnic-origin groups by interacting the two terms (see *graph 4.20*). Interaction effects are statistically significant at the 95% level for Indian and Bangladeshi women, and at the 90% for Pakistani. Bangladeshi and Pakistani women benefit significantly more than native, and than women from the rest of the groups, from having a working mother-in-law, as shown by their steeper slopes. Thus, among Bangladeshi and Pakistani women with a p/sp who grew up in a household with a working mother, there are no significant differences in participation with respect to native. Bivariate results above have shown for these two groups significant differences in p/sp's average GRA (especially among men partnered to Bangladeshi women) and weekly hours of housework (especially among men partnered to Pakistani women) conditional on their mothers' work status. Differences that, among other factors, are likely to explain the larger effect of the mother-in-law's work status for women in these two groups.

*Graph 4.20 Average Adjusted Probabilities (AAP) of LFP by mother-in-law's work status. Differences between native and immigrant women over ethnic origin (different slopes)*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

## 4.6 Summary and discussion

In this chapter I have first observed existing gender and ethnic origin LFP gaps. On one hand, and as expected, women participate substantially less in the labour force than their co-ethnic male counterparts. On the other hand, Pakistani and Bangladeshi women, and Indian to a lesser extent, have a lower LFP than women from other ethnic origins including native. This is the case even if participation increases substantively for these groups in the second generation. To explain differences in FLFP between and within ethnic-origin groups from a non-ethnic perspective, I have discussed several explanatory factors both at the individual and couple levels, and focused mainly on the explanatory role of the labour market behaviour of the previous generation of women. I have tested more concretely the effect of the mother and mother-in-law's work statuses at respondents and partners/spouses' young ages on LFP in adulthood, and discussed the main possible mediators of these associations.

In the first part of the analyses, including both single and partnered women, I have found a positive association between having a working mother when growing up and FLFP. Results have shown that this association is mediated to a large extent by respondents' years of education, GRA, and family-related decisions. In terms of immigrant and ethnic-origin penalties, additive models have confirmed the existence of significant differences in FLFP for first generation immigrant women, as well as for Indian, Pakistani, and Bangladeshi. With the specification of interaction models, I have observed that while first generation immigrant women seem to benefit more than native and second generation women from having a working mother when growing up, the working mother effect behaves in a similar way across ethnic origin categories.

In the second part, I have restricted the sample to only married/partnered women to focus on the effect of the p/sp's characteristics on FLFP along and on top of individual level factors. I have argued that the working mother-in-law effect on FLFP is likely to be channelled through p/sp's GRA and contribution to housework —measured as average weekly hours. Overall, results have shown that partners' GRA partly mediate the association, although not their average hours of housework per week. I have not tested however the role of these mediators by migration status and ethnic origin with multivariate analyses. Nevertheless, among men partnered to Pakistani women, I have observed a high correlation between their mother-in-law's work status and their contribution to housework. I have concluded that the work status of the mother-in-law exerts an effect on FLFP, which remains substantive and statistically significant once respondents' individual characteristics are accounted for, including the mother's work status, which effect reduces and becomes not statistically significant at conventional significance levels. Further research on mediators differentiating the analyses by migration status and ethnic origin is needed.

The main aim of the second part of the analyses has been to test whether the working mother-in-law effect varies across migration status and ethnic origin categories. Unlike the case of the mother's work status, for married/partnered women I have found significant interaction effects between the mother-in-law's work status and ethnic origin. In particular, interaction coefficients have shown that Pakistani and Bangladeshi women benefit more from having a working mother-in-law than native. This indicates that women in these two groups are more likely than native women to be influenced by their partners' characteristics, preferences, and attitudes in their decision to participate in the labour force.

This chapter contributes to the literature on ethnic and migration penalties in women's LFP as it is the first to use a working mother-in-law explanation to account for differences

between migration status categories and ethnic origin groups. This complements human capital and household specialisation theories by encompassing both a social origin and a couple-level approach. It more specifically contributes to the research of Khoudja and Platt (2017) and Khoudja and Fleischmann (2015a; 2015b) on the determinants of labour force participation of immigrant women (and their offspring) in the UK and the Netherlands respectively by accounting for not only women's and partners' own attitudes, but for their precedent cause, i.e. the labour market behaviour of the former generation of women.

Further research is however needed. On one hand, the mediating roles of GRA and involvement in housework, and how these factors might vary by ethnic origin and migration status, should be tested in more detail. However, future research should also consider other possible mediators and test their validity and explanatory power across groups. On the other hand, it would be also important to have more information on different characteristics of both the mother and the mother-in-law such as, among other, level of education, social class, reason for migrating (e.g. family reunification or work), and region within the country of origin —with special attention to the urban/rural division.

## 4.7 Appendix

*Table A4.1 Correlation table between the five GRA' indicators*

| | scopfamarec | scopfambrec | scopfamfrec | scopfamhrec | scopfamd |
|---|---|---|---|---|---|
| scopfamarec | 1 | | | | |
| scopfambrec | 0.7079* | 1 | | | |
| scopfamfrec | 0.4563* | 0.5014* | 1 | | |
| scopfamhrec | 0.0498* | 0.0842* | 0.0467* | 1 | |
| scopfamd | 0.0724* | 0.1043* | 0.1228* | -0.1677* | 1 |

Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.2 Cronbach's Alpha test results*

| Item | Obs | Sign | Item-test corr. | Item-rest corr. | Average inter-item cov. | Alpha |
|---|---|---|---|---|---|---|
| scopfamarec | 15715 | + | 0.7872 | 0.5844 | 0.1410195 | 0.3842 |
| scopfambrec | 15715 | + | 0.8264 | 0.6383 | 0.114751 | 0.3375 |
| scopfamfrec | 15715 | + | 0.724 | 0.4886 | 0.1781354 | 0.4485 |
| scopfamhrec | 15715 | + | 0.2975 | 0.0142 | 0.3926856 | 0.6778 |
| scopfamd | 15715 | + | 0.3516 | 0.0599 | 0.3711043 | 0.6639 |
| Test scale | | | | | 0.2395392 | 0.5889 |

Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.3 Exploratory factor analyses with five and three GRA' indicators*

*Five GRA' indicators*

| Factor analysis/corr. | No. of observations = | 15715 |
|---|---|---|
| Method: PC factors | Retained factors = | 2 |
| Rotation: (unrotated) | Number of params = | 9 |

| Factor | Eigenvalue | Diff. | Prop. | Cum. |
|---|---|---|---|---|
| F1 | 2.14939 | 0.98166 | 0.4299 | 0.4299 |
| F2 | 1.16773 | 0.36005 | 0.2335 | 0.6634 |
| F3 | 0.80768 | 0.22027 | 0.1615 | 0.825 |
| F4 | 0.58742 | 0.29964 | 0.1175 | 0.9424 |
| F5 | 0.28778 | . | 0.0576 | 1 |

LR test: independent vs. saturated: chi2(10) = 1.7e+04 Prob>chi2 = 0.0000

*Three GRA' indicators*

| Factor analysis/corr. | No. of observations = | 15715 |
|---|---|---|
| Method: PC factors | Retained factors = | 1 |
| Rotation: (unrotated) | Number of params = | 3 |

| Factor | Eigenvalue | Diff. | Prop. | Cum. |
|---|---|---|---|---|
| F1 | 2.11825 | 1.52594 | 0.7061 | 0.7061 |
| F2 | 0.59231 | 0.30287 | 0.1974 | 0.9035 |
| F3 | 0.28944 | . | 0.0965 | 1 |

LR test: independent vs. saturated: chi2(3) = 1.6e+04 Prob>chi2 = 0.0000

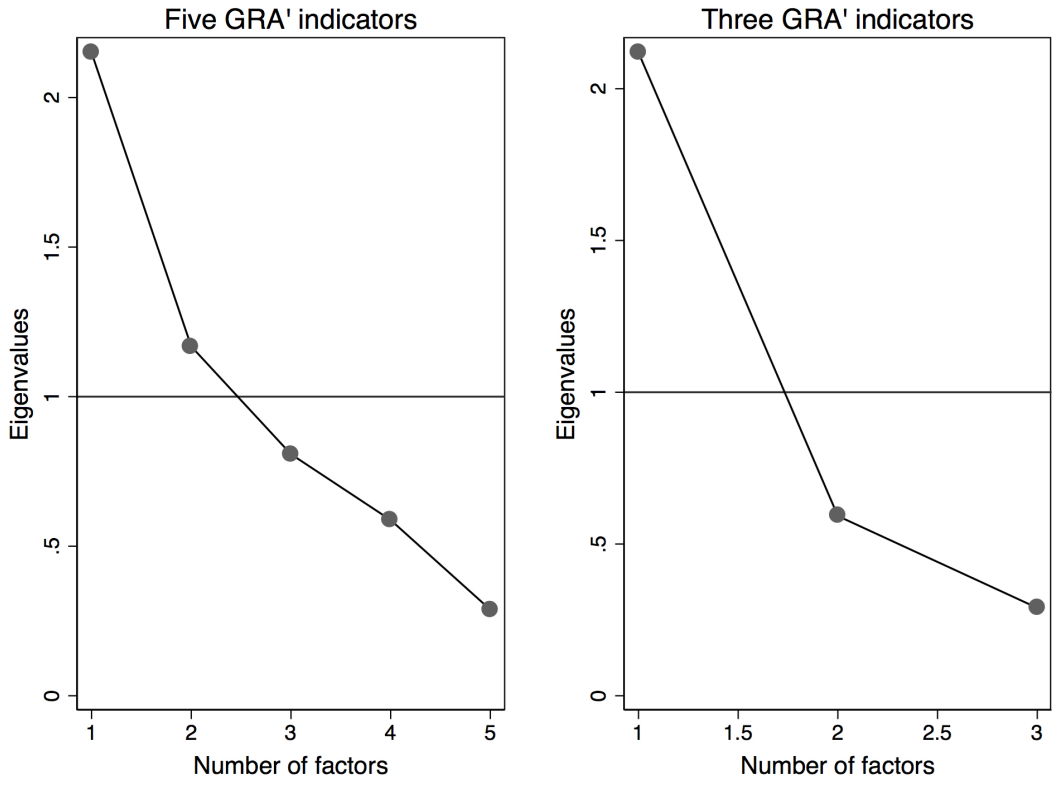
| Variable | Factor1 | Factor2 | Uniqueness |
|---|---|---|---|
| scopfamarec | 0.8625 | | 0.2535 |
| scopfambrec | 0.8862 | | 0.2119 |
| scopfamfrec | 0.7546 | | 0.4297 |
| scopfamhrec | | 0.7785 | 0.3832 |
| scopfamd | | -0.7452 | 0.4046 |

| Variable | Factor1 | Uniqueness |
|---|---|---|
| scopfamarec | 0.8708 | 0.2416 |
| scopfambrec | 0.8895 | 0.2089 |
| scopfamfrec | 0.7542 | 0.4312 |

Notes: Blanks represent abs(loading) <.45.

Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Graph A4.1 Screeplots for five and three GRA indicators' solutions*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.4 Summary statistics (all women)*

| | | UK | IRL | IND | PAK | BNG | AFR | JAM |
|---|---|---|---|---|---|---|---|---|
| Variables: | Range | M/P (SD) | M/P (SD) | M/P (SD) | M/P (SD) | M/P (SD) | M/P (SD) | M/P (SD) |
| LFP (DV1) | 0/1 | 85.13 | 85.44 | 76.68 | 45.37 | 52.01 | 79.22 | 88.01 |
| Job hours/week (DV2) | 0-97 | 23.28 (14.93) | 23.90 (15.23) | 20.92 (16.33) | 8.97 (14.22) | 10.77 (15.10) | 19.90 (16.49) | 23.36 (15.86) |
| Working mother (age 14) | 0/1 | 69.63 | 67.19 | 43.62 | 15.38 | 8.98 | 54.17 | 75.68 |
| Education (years) | 0-17 | 12.45 (4.05) | 12.97 (3.85) | 12.61 (4.30) | 10.66 (5.49) | 10.61 (5.29) | 12.60 (4.80) | 12.64 (3.82) |
| Gender role attitudes | 1-5 | 2.55 (0.88) | 2.49 (0.94) | 2.97 (0.99) | 3.43 (0.97) | 3.25 (0.94) | 2.99 (0.98) | 2.51 (0.89) |
| Family structure | 1-4 | | | | | | | |
| Single, no children | | 18.21 | 21.57 | 18.10 | 17.90 | 21.98 | 18.29 | 31.76 |
| Single, children | | 11.74 | 12.37 | 5.80 | 10.52 | 8.05 | 32.86 | 32.60 |
| Partner, no children | | 32.96 | 30.17 | 23.55 | 11.93 | 9.60 | 10.48 | 11.99 |
| Partner, children | | 37.09 | 35.90 | 52.55 | 59.65 | 60.37 | 38.37 | 23.65 |
| No. of children | 0/4 | 0.86 | 0.83 | 1.08 | 1.65 | 1.50 | 1.48 | 0.97 |
| Child <5 years | 0/1 | 15.3 | 13.73 | 22.04 | 30.93 | 28.48 | 29.84 | 14.02 |
| Religiosity | 0-4 | 1.88 (1.03) | 2.26 (1.13) | 3.01 (1.10) | 3.67 (0.68) | 3.63 (0.76) | 3.46 (0.93) | 2.93 (1.15) |
| First generation | 0/1 | — | 12.29 | 52.67 | 54.63 | 62.23 | 82.77 | 29.22 |
| Age | 16-64 | 42.11 (11.52) | 42.85 (10.91) | 38.59 (10.36) | 35.56 (9.63) | 33.35 (8.92) | 38.25 (9.39) | 41.73 (10.83) |
| Region | 1-5 | | | | | | | |
| London | | 4.29 | 11.84 | 35.61 | 17.11 | 62.23 | 62.17 | 59.29 |
| Wales | | 5.45 | 3.62 | 2.44 | 1.10 | 1.86 | 1.07 | 0.68 |
| Scotland | | 8.30 | 6.86 | 1.51 | 1.41 | 0.62 | 2.31 | 0.17 |
| N. Ireland | | 5.31 | 11.46 | 0.46 | 0.00 | 0.00 | 0.00 | 0.00 |
| Other | | 76.65 | 66.21 | 59.98 | 80.38 | 35.29 | 34.46 | 39.86 |
| Health | 1-5 | 2.39 (0.99) | 2.40 (1.02) | 2.50 (1.01) | 2.82 (1.06) | 2.67 (1.01) | 2.30 (1.01) | 2.75 (1.01) |
| *N* | | 11,442 | 1,326 | 862 | 637 | 323 | 563 | 592 |

M/P (means and percentages) / SD (standard deviations)

Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.5 Pairwise correlations between the main predictors of FLFP by ethnic origin (all women)*

**UK**

| | GRA | Edu. | Work. mother | No. of child. | Relig. |
|---|---|---|---|---|---|
| GRA | 1 | | | | |
| Edu. | -0.16* | 1 | | | |
| Work. mother | -0.11* | 0.10* | 1 | | |
| No. of child. | 0.10* | 0.03* | -0.01 | 1 | |
| Relig. | 0.09* | 0.14* | -0.04* | -0.02 | 1 |

**BNG**

| | GRA | Edu. | Work. mother | No. of child. | Relig. |
|---|---|---|---|---|---|
| GRA | 1 | | | | |
| Edu. | -0.27* | 1 | | | |
| Work. mother | -0.18* | 0.11 | 1 | | |
| No. of child. | 0.23* | -0.30* | -0.03 | 1 | |
| Relig. | 0.19* | -0.09 | -0.20* | 0.13 | 1 |

**IRL**

| | GRA | Edu. | Work. mother | No. of child. | Relig. |
|---|---|---|---|---|---|
| GRA | 1 | | | | |
| Edu. | -0.21* | 1 | | | |
| Work. mother | -0.04 | 0.12* | 1 | | |
| No. of child. | 0.13* | 0.03* | 0.03 | 1 | |
| Relig. | 0.10* | 0.08* | -0.06 | 0.03 | 1 |

**AFR**

| | GRA | Edu. | Work. mother | No. of child. | Relig. |
|---|---|---|---|---|---|
| GRA | 1 | | | | |
| Edu. | -0.28* | 1 | | | |
| Work. mother | -0.15* | 0.21* | 1 | | |
| No. of child. | 0.23* | -0.20* | -0.15* | 1 | |
| Relig. | 0.18* | -0.01 | -0.04 | 0.12* | 1 |

**IND**

| | GRA | Edu. | Work. mother | No. of child. | Relig. |
|---|---|---|---|---|---|
| GRA | 1 | | | | |
| Edu. | -0.24* | 1 | | | |
| Work. mother | -0.25* | 0.17* | 1 | | |
| No. of child. | 0.19* | -0.05 | -0.10* | 1 | |
| Relig. | 0.17* | -0.11* | -0.26* | 0.17* | 1 |

**JAM**

| | GRA | Edu. | Work. mother | No. of child. | Relig. |
|---|---|---|---|---|---|
| GRA | 1 | | | | |
| Edu. | -0.13* | 1 | | | |
| Work. mother | -0.06 | 0.04 | 1 | | |
| No. of child. | 0.20* | 0.01 | -0.05 | 1 | |
| Relig. | 0.16* | 0.10 | -0.00 | 0.08 | 1 |

**PAK**

| | GRA | Edu. | Work. mother | No. of child. | Relig. |
|---|---|---|---|---|---|
| GRA | 1 | | | | |
| Edu. | -0.24* | 1 | | | |
| Work. mother | -0.12* | 0.18* | 1 | | |
| No. of child. | 0.24* | -0.11* | -0.05 | 1 | |
| Relig. | 0.04 | -0.03 | -0.14* | 0.02 | 1 |

Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.6 Mediating effects of women's individual-level characteristics on FLFP*

| | M0 | M1 | M2 | M3 | M4 | M5 |
|---|---|---|---|---|---|---|
| Mother's work status | 0.084*** | 0.059*** | 0.071*** | 0.051*** | 0.059*** | 0.036*** |
| | (0.068 - 0.101) | (0.042 - 0.075) | (0.055 - 0.088) | (0.034 - 0.067) | (0.044 - 0.075) | (0.021 - 0.051) |
| Years of education | | | 0.016*** | 0.013*** | | 0.011*** |
| | | | (0.014 - 0.018) | (0.011 - 0.015) | | (0.009 - 0.013) |
| Gender Role Attitudes | | -0.102*** | | -0.093*** | | -0.073*** |
| | | (-0.110 - -0.093) | | (-0.102 - -0.085) | | (-0.081 - -0.065) |
| Family structure | | | | | | |
| (ref. single no children): | | | | | | |
| Single, children | | | | | -0.017 | -0.009 |
| | | | | | (-0.051 - 0.016) | (-0.041 - 0.024) |
| Partner, no children | | | | | -0.066*** | -0.062*** |
| | | | | | (-0.080 - -0.052) | (-0.076 - -0.048) |
| Partner, children | | | | | 0.033** | 0.026* |
| | | | | | (0.002 - 0.065) | (-0.005 - 0.056) |
| Presence of children <5 | | | | | -0.145*** | -0.140*** |
| | | | | | (-0.170 - -0.119) | (-0.164 - -0.116) |
| Number of children <18 | | | | | -0.129*** | -0.111*** |
| | | | | | (-0.144 - -0.114) | (-0.125 - -0.097) |
| Constant | 0.870*** | 1.071*** | 0.684*** | 0.904*** | 0.625*** | 0.686*** |
| | (0.782 - 0.958) | (0.981 - 1.161) | (0.593 - 0.775) | (0.810 - 0.998) | (0.540 - 0.710) | (0.596 - 0.776) |
| Observations | 15,015 | 15,015 | 15,015 | 15,015 | 15,015 | 15,015 |
| R-squared | 0.032 | 0.093 | 0.063 | 0.113 | 0.160 | 0.209 |

Robust ci in parentheses | *** p<0.01, ** p<0.05, * p<0.1

Notes: Weighted coefficients. Models control for age, age2, region, and health status.

Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.7 Immigrant penalties in participation and interaction effect between migration status and mother's work status*

| | M0 | M1 | M2 |
|---|---|---|---|
| Working mother | 0.084*** | 0.075*** | 0.186*** |
| | (0.068 - 0.101) | (0.058 - 0.092) | (0.132 - 0.240) |
| Migration status: | | | |
| 2nd generation | | 0.110*** | 0.151*** |
| | | (0.075 - 0.146) | (0.098 - 0.203) |
| Native | | 0.102*** | 0.166*** |
| | | (0.069 - 0.134) | (0.125 - 0.207) |
| 2nd gen.#working mother | | | -0.105*** |
| | | | (-0.175 - -0.035) |
| Native#working mother | | | -0.123*** |
| | | | (-0.181 - -0.066) |
| Constant | 0.870*** | 0.788*** | 0.640*** |
| | (0.782 - 0.958) | (0.697 - 0.878) | (0.603 - 0.678) |
| Observations | 15,015 | 15,015 | 15,015 |
| R-squared | 0.032 | 0.037 | 0.020 |

Robust ci in parentheses | *** p<0.01, ** p<0.05, * p<0.1
Notes: Weighted coefficients. Models control for age, age2, region, and health status.
Source: *Understanding Society*, waves 2 and 4, author's analysis.

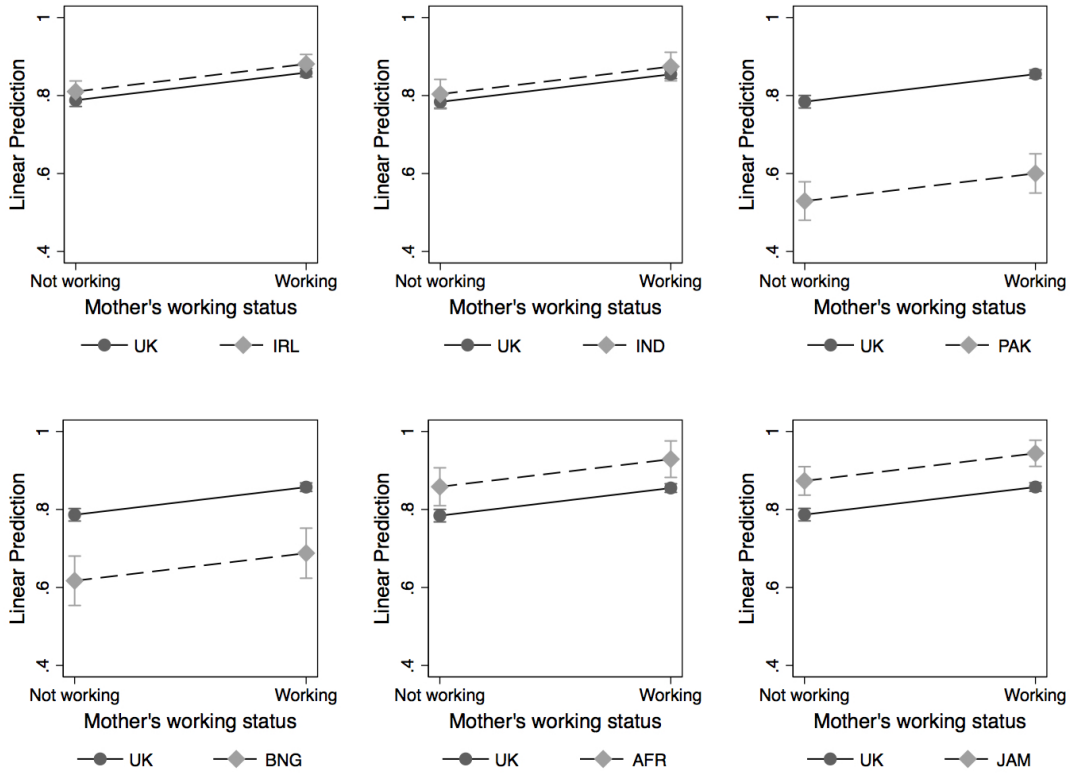
*Table A4.8 Ethnic-origin penalties in FLFP and interaction effect between ethnic origin and mother's work status*

| | M0 | M1 | M2 | M3 |
|---|---|---|---|---|
| Working mother | 0.084*** | 0.069*** | 0.066*** | 0.066*** |
| | (0.068 - 0.101) | (0.052 - 0.087) | (0.048 - 0.083) | (0.046 - 0.085) |
| Ethnic origin: | | | | |
| IRL | | 0.008 | 0.018 | 0.021 |
| | | (-0.020 - 0.035) | (-0.010 - 0.046) | (-0.028 - 0.070) |
| IND | | -0.007 | 0.038* | -0.053* |
| | | (-0.044 - 0.031) | (-0.001 - 0.077) | (-0.110 - 0.005) |
| PAK | | -0.249*** | -0.201*** | -0.267*** |
| | | (-0.308 - -0.190) | (-0.262 - -0.141) | (-0.333 - -0.201) |
| BNG | | -0.192*** | -0.141*** | -0.212*** |
| | | (-0.274 - -0.110) | (-0.222 - -0.060) | (-0.305 - -0.119) |
| AFR | | -0.018 | 0.057** | -0.037 |
| | | (-0.066 - 0.029) | (0.004 - 0.111) | (-0.113 - 0.040) |
| JAM | | 0.064*** | 0.089*** | 0.114*** |
| | | (0.023 - 0.105) | (0.046 - 0.131) | (0.049 - 0.180) |
| Interactions: | | | | |
| IRL#working mother | | | | -0.019 |
| | | | | (-0.078 - 0.039) |
| IND#working mother | | | | 0.099*** |
| | | | | (0.030 - 0.168) |
| PAK#working mother | | | | 0.078 |
| | | | | (-0.065 - 0.221) |
| BNG#working mother | | | | 0.098 |
| | | | | (-0.084 - 0.279) |
| AFR#working mother | | | | 0.032 |
| | | | | (-0.058 - 0.121) |
| JAM#working mother | | | | -0.069* |
| | | | | (-0.146 - 0.007) |
| 1st generation immigrant | | | -0.097*** | |
| | | | (-0.134 - -0.059) | |
| Constant | 0.870*** | 0.894*** | 0.895*** | 0.897*** |
| | (0.782 - 0.958) | (0.804 - 0.984) | (0.804 - 0.985) | (0.806 - 0.988) |
| Observations | 15,015 | 15,015 | 15,015 | 15,015 |
| R-squared | 0.032 | 0.043 | 0.045 | 0.044 |

Robust ci in parentheses | *** p<0.01, ** p<0.05, * p<0.1

Notes: Weighted coefficients. Models control for age, age2, region, and health status.
Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Graph A4.2 Average Adjusted Probabilities (AAP) of LFP by mother's work status. Differences between native and immigrant women over ethnic origin (Different intercepts, controlling for migration status)*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.9 Summary statistics (married/partnered women)*

| | | UK | IRL | IND | PAK | BNG | AFR | JAM |
|---|---|---|---|---|---|---|---|---|
| Variables: | Range | M/P (SD) | M/P (SD) | M/P (SD) | M/P (SD) | M/P (SD) | M/P (SD) | M/P (SD) |
| LFP | 0/1 | 86.33 | 87.14 | 73.61 | 36.23 | 41.96 | 85.31 | 88.28 |
| P/sp charact.: | | | | | | | | |
| Working mother (age 14) | 0/1 | 67.35 | 64.88 | 36.48 | 10.51 | 12.59 | 53.67 | 65.62 |
| Gender Role Attitudes | 1-5 | 2.70 | 2.71 | 3.16 | 3.67 | 3.45 | 3.04 | 2.73 |
| Hours housework/week | 0/20+ | 5.71 | 6.51 | 6.12 | 4.10 | 5.86 | 6.54 | 6.62 |
| Individual charact.: | | | | | | | | |
| Working mother (age 14) | 0/1 | 69.66 | 71.21 | 35.84 | 14.13 | 8.39 | 58.76 | 64.06 |
| First generation | 0/1 | — | 10.75 | 65.88 | 68.84 | 73.43 | 87.57 | 33.59 |
| Education (years) | 0-17 | 12.64 | 13.28 | 12.70 | 10.76 | 10.13 | 14.31 | 12.94 |
| Gender role attitudes | 1-5 | 2.57 | 2.41 | 3.10 | 3.57 | 3.42 | 2.85 | 2.50 |
| No. of children | 0/4 | 0.92 | 0.93 | 1.33 | 2.00 | 1.86 | 1.62 | 1.23 |
| Child <5 years | 0/1 | 17.71 | 16.31 | 28.11 | 40.58 | 40.56 | 36.72 | 21.09 |
| Age | 16-64 | 43.87 | 44.23 | 40.00 | 36.82 | 35.20 | 39.24 | 43.88 |
| London | 0/1 | 3.59 | 12.09 | 39.91 | 20.65 | 61.54 | 59.32 | 52.34 |
| Health | 1-5 | 2.37 | 2.30 | 2.44 | 2.79 | 2.59 | 2.16 | 2.73 |
| *N* | | 4,907 | 521 | 466 | 276 | 143 | 177 | 128 |

M/P (means and percentages) / SD (standard deviations)

Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.10 Pairwise correlations between the main predictors of FLFP by ethnic origin (married/partnered women)*

**UK**

| | P/sp GRA | P/sp housework | Working mother-in-law |
|---|---|---|---|
| P/sp GRA | 1 | | |
| P/sp housework | -0.1208* | 1 | |
| Working mother-in-law | -0.0878* | -0.0236 | 1 |

**BNG**

| | P/sp GRA | P/sp housework | Working mother-in-law |
|---|---|---|---|
| P/sp GRA | 1 | | |
| P/sp housework | -0.0503 | 1 | |
| Working mother-in-law | -0.3622* | 0.1513 | 1 |

**IRL**

| | P/sp GRA | P/sp housework | Working mother-in-law |
|---|---|---|---|
| P/sp GRA | 1 | | |
| P/sp housework | -0.0463 | 1 | |
| Working mother-in-law | -0.0710 | 0.0970 | 1 |

**AFR**

| | P/sp GRA | P/sp housework | Working mother-in-law |
|---|---|---|---|
| P/sp GRA | 1 | | |
| P/sp housework | -0.1280 | 1 | |
| Working mother-in-law | -0.0348 | 0.0809 | 1 |

**IND**

| | P/sp GRA | P/sp housework | Working mother-in-law |
|---|---|---|---|
| P/sp GRA | 1 | | |
| P/sp housework | -0.1544* | 1 | |
| Working mother-in-law | -0.2270* | -0.0836 | 1 |

**JAM**

| | P/sp GRA | P/sp housework | Working mother-in-law |
|---|---|---|---|
| P/sp GRA | 1 | | |
| P/sp housework | -0.1622 | 1 | |
| Working mother-in-law | -0.0450 | 0.1400 | 1 |

**PAK**

| | P/sp GRA | P/sp housework | Working mother-in-law |
|---|---|---|---|
| P/sp GRA | 1 | | |
| P/sp housework | 0.0423 | 1 | |
| Working mother-in-law | -0.1080 | 0.1601* | 1 |

Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.11 Immigrant penalties in participation and interaction effect between migration status and mother-in-law's work status*

| | M0 | M1 | M2 |
|---|---|---|---|
| Working mother | 0.094*** | 0.082*** | 0.240*** |
| | (0.070 - 0.118) | (0.058 - 0.106) | (0.163 - 0.316) |
| Migration status: | | | |
| 2nd generation | | 0.125*** | 0.168*** |
| | | (0.072 - 0.179) | (0.088 - 0.247) |
| Native | | 0.128*** | 0.227*** |
| | | (0.082 - 0.174) | (0.169 - 0.285) |
| 2nd gen.#working mother | | | -0.109** |
| | | | (-0.213 - -0.005) |
| Native#working mother | | | -0.185*** |
| | | | (-0.267 - -0.104) |
| Constant | 0.629*** | 0.549*** | 0.599*** |
| | (0.456 - 0.803) | (0.375 - 0.723) | (0.546 - 0.652) |
| Observations | 6,410 | 6,410 | 6,410 |
| R-squared | 0.052 | 0.059 | 0.033 |

Robust ci in parentheses | *** p<0.01, ** p<0.05, * p<0.1
Notes: Weighted coefficients. Models control for age, age2, region, and health status.
Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.12 Mediating effects of p/sp GRA' and hours of housework on FLFP*

| | M0 | M1 | M2 | M3 |
|---|---|---|---|---|
| Mother-in-law's work status | 0.094*** | 0.073*** | 0.095*** | 0.074*** |
| | (0.070 - 0.118) | (0.049 - 0.096) | (0.071 - 0.119) | (0.050 - 0.097) |
| Sp/p gender role attitudes | | -0.097*** | | -0.095*** |
| | | (-0.109 - -0.086) | | (-0.106 - -0.083) |
| Sp/p Hours housework (week) | | | 0.006*** | 0.004*** |
| | | | (0.004 - 0.008) | (0.002 - 0.006) |
| Constant | 0.629*** | 0.888*** | 0.602*** | 0.863*** |
| | (0.456 - 0.803) | (0.717 - 1.059) | (0.428 - 0.775) | (0.692 - 1.035) |
| Observations | 6,410 | 6,410 | 6,410 | 6,410 |
| R-squared | 0.052 | 0.107 | 0.058 | 0.110 |

Robust ci in parentheses | *** p<0.01, ** p<0.05, * p<0.1
Notes: Weighted coefficients. Models control for age, age2, region, and health status.
Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.13 Mother and mother in law's effects on FLFP including women's individual-level characteristics*

| | M0 | M1 | M2 |
|---|---|---|---|
| Working mother-in-law | 0.094*** | 0.085*** | 0.064*** |
| | (0.070 - 0.118) | (0.061 - 0.109) | (0.042 - 0.086) |
| Working Mother | | 0.067*** | 0.022* |
| | | (0.043 - 0.092) | (-0.001 - 0.045) |
| 1st generation immigrant | | | -0.042* |
| | | | (-0.085 - 0.002) |
| Years of education | | | 0.013*** |
| | | | (0.010 - 0.016) |
| Number of children <18 | | | -0.070*** |
| | | | (-0.083 - -0.058) |
| Presence of children <5 | | | -0.086*** |
| | | | (-0.119 - -0.054) |
| Gender Role Attitudes | | | -0.074*** |
| | | | (-0.086 - -0.062) |
| Constant | 0.629*** | 0.607*** | 0.634*** |
| | (0.456 - 0.803) | (0.435 - 0.779) | (0.459 - 0.809) |
| Observations | 6,410 | 6,410 | 6,410 |
| R-squared | 0.052 | 0.059 | 0.192 |

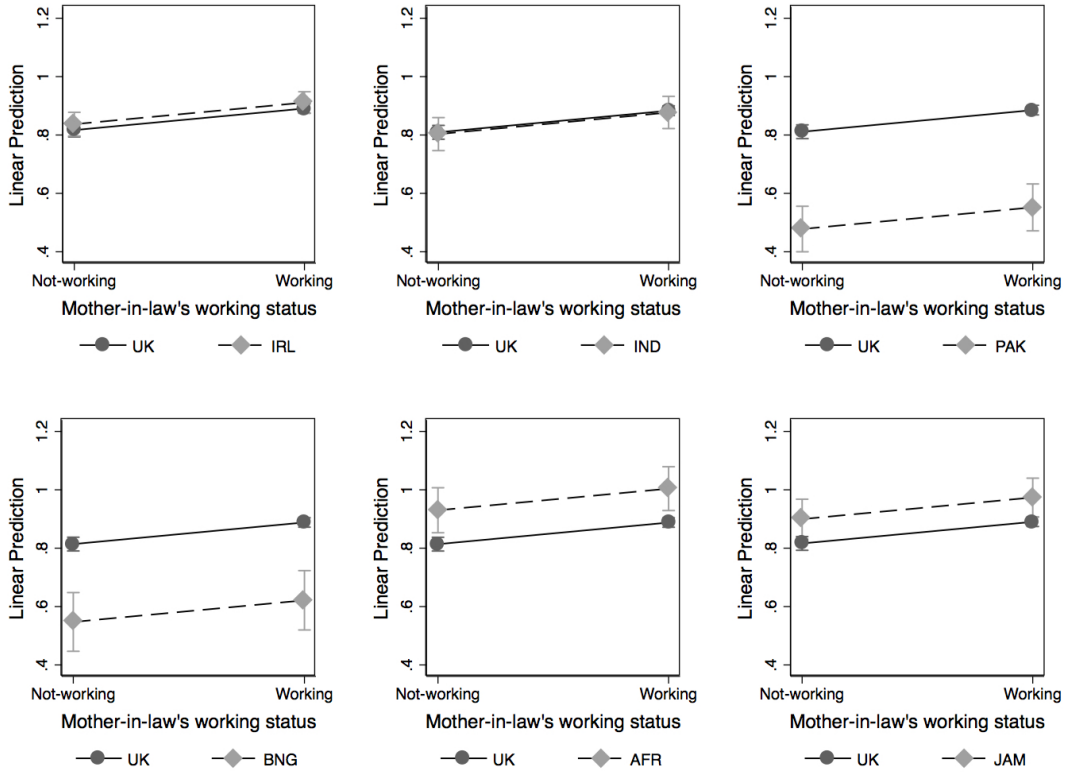
Robust ci in parentheses | *** p<0.01, ** p<0.05, * p<0.1
Notes: Weighted coefficients. Models control for age, age2, region, and health status.
Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Table A4.14 Ethnic-origin penalties in FLFP and interaction effect between ethnic origin and mother-in-law's work status*

| | M0 | M1 | M2 | M3 |
|---|---|---|---|---|
| Working mother-in-law | 0.094*** | 0.073*** | 0.074*** | 0.062*** |
| | (0.070 - 0.118) | (0.049 - 0.098) | (0.051 - 0.097) | (0.035 - 0.089) |
| Country of origin: | | | | |
| IRL | | 0.009 | 0.018 | 0.015 |
| | | (-0.031 - 0.049) | (-0.023 - 0.058) | (-0.061 - 0.091) |
| IND | | -0.047* | 0.009 | -0.101*** |
| | | (-0.100 - 0.007) | (-0.056 - 0.075) | (-0.177 - -0.024) |
| PAK | | -0.370*** | -0.310*** | -0.411*** |
| | | (-0.455 - -0.285) | (-0.404 - -0.215) | (-0.498 - -0.325) |
| BNG | | -0.278*** | -0.222*** | -0.384*** |
| | | (-0.401 - -0.155) | (-0.350 - -0.094) | (-0.525 - -0.243) |
| AFR | | 0.038 | 0.115*** | 0.028 |
| | | (-0.029 - 0.105) | (0.031 - 0.199) | (-0.078 - 0.135) |
| JAM | | 0.039 | 0.063 | 0.045 |
| | | (-0.050 - 0.129) | (-0.032 - 0.159) | (-0.130 - 0.219) |
| Interactions: | | | | |
| IRL#working mother-in-law | | | | -0.010 |
| | | | | (-0.099 - 0.079) |
| IND#working mother-in-law | | | | 0.126*** |
| | | | | (0.032 - 0.220) |
| PAK#working mother-in-law | | | | 0.250* |
| | | | | (-0.016 - 0.516) |
| BNG#working mother-in-law | | | | 0.332*** |
| | | | | (0.093 - 0.571) |
| AFR#working mother-in-law | | | | 0.009 |
| | | | | (-0.113 - 0.132) |
| JAM#working mother-in-law | | | | -0.014 |
| | | | | (-0.213 - 0.186) |
| 1st generation immigrant | | | -0.091*** | |
| | | | (-0.154 - -0.028) | |
| Constant | 0.629*** | 0.670*** | 0.684*** | 0.687*** |
| | (0.456 - 0.803) | (0.496 - 0.843) | (0.510 - 0.858) | (0.512 - 0.862) |
| Observations | 6,410 | 6,410 | 6,410 | 6,410 |
| R-squared | 0.052 | 0.075 | 0.077 | 0.079 |

Robust ci in parentheses | *** p<0.01, ** p<0.05, * p<0.1
Notes: Weighted coefficients. Models control for age, age2, region, and health status.
Source: *Understanding Society*, waves 2 and 4, author's analysis.

*Graph A4.3 Average Adjusted Probabilities (AAP) of LFP by mother-in-law's work status. Differences between native and immigrant women over ethnic origin (Different intercepts, controlling for migration status)*




Source: *Understanding Society*, waves 2 and 4, author's analysis.

# CHAPTER 5. THE ROLE OF SOCIAL ORIGIN ON THE LABOUR-MARKET OUTCOMES OF THE SECOND GENERATION AND NATIVES

> "I now feel that many important features of black and white relations in America are not captured when the issue is defined as a majority versus minority and that a preoccupation with race and racial conflict obscures fundamental problems that derive from the intersection of class with race."
>
> William Julius Wilson,
> *The Declining Significance of Race. Blacks and Changing American Institutions*

## 5.1 Introduction

One of the main purposes of this thesis is to define ethnic penalties and premiums in the labour market in non-ethnic terms by bringing social origin explanations back in. In this chapter I study the existence and determinants of ethnic gaps in employment and occupational attainment, and the role social origin plays in explaining them. Social origin approaches have been rarely used until recently for explaining ethnic penalties/premiums in the labour market —see e.g. Heath and Li (2016), Gracia et al. (2015), Platt (2005), and Zuccotti (2014). This has been mainly due to practical reasons such as data availability, and to a greater focus on ethnic differences in education; but also to the prolonged influence of the 'culturalist' turn in migration studies. This chapter builds on the aggregate mobility patterns found in chapter 3 by quantifying at the individual level the direct effect of social origin on destination and its variation by ethnic origin, and also by accounting for the moderating and mediating roles of age and education.

*Problematic assumptions on the role of social origin in migration research*

As Zuccottti (2014:2) points out, two misleading assumptions are often made in quantitative research on migration with respect to the role of social origin. These are: (1) the assumption that the social class of origin is equally distributed across different ethnic-origin groups, even if descriptive evidence shows that immigrants come from a more disadvantaged social background; and (2) the assumption that the mechanisms of the intergenerational transmission of social origin work similarly for immigrants and natives —i.e. social origin operates additively, but not interactively, with migration status and country of origin. To these assumptions, I add a third one on measurement equivalence. It is often assumed that there is

measurement invariance of social origin constructs (especially social class) across ethnic minorities and natives. However, without further information on the relative educational and occupational position of immigrants and their families in the social structure at origin, we cannot assume that a given social origin construct have the same meaning across groups (Feliciano and Lanuza 2017; Lenkeit, Caro, and Strand 2015).

Regarding the first assumption, we should not conclude that we observe ethnic-origin penalties/premiums in a given educational or labour market outcome unless we are able to show that there is an over/under-achievement of a particular ethnic-origin group with respect to the expected one on the basis of its specific social origin distribution (Duncan and Duncan 1968). With respect to the second assumption, there are theoretical reasons (which has been scarcely tested in the literature) to believe that social class of origin might have a differential effect on labour-market outcomes for immigrants with respect to natives —i.e. for instance a non-constant effect of social origin over ethnic categories on occupational attainment (Duncan and Duncan 1968). Finally, the third assumption presents more difficulties to be addressed formally in this chapter, although I take it into account in the interpretation of the findings.

*Main aims and research questions*

Existing evidence shows that the processes of getting employment and reaching a particular occupational position are driven by different factors. For the analyses on employment, I focus primarily on the effect of the parental work status when the respondent was aged 14. As far as I am aware, this approach has not been yet formally tested to account for ethnic differences in labour market participation. For occupational attainment, I build on the findings of the third chapter of this thesis on aggregate patterns of intergenerational social mobility of second generation immigrants and natives bringing the discussion to the micro level. In this second part, I focus on the effect of parental social class, including parental work status, on respondents' occupational attainment.

I pose four research questions. The first one refers to whether social origin[73] has a direct effect (DESO)[74] on both the probability of being employed and reaching a particular occupational position; and the extent to which it contributes in explaining observed ethnic origin differentials with respect to natives. The second asks whether the DESO on employment

[73] Social origin refers to parental work status in the case of employment, and parental social class (+ a 'workless household' category) for the study of occupational attainment.
[74] Abbreviation used by Bernardi and Ballarino (2016).

and attainment differs between the second generation and natives. Given the observed mediating and moderating roles of education between social origin and destination for the majority of the population (Bernardi and Ballarino 2016; Hout 1988; Torche 2011), the third question inquires how these effects of education unfold among second generation immigrants with different ethnic origin backgrounds. The fourth and last question asks whether the observed gender differences in the DESO on attainment for the majority of the population, often found to be lower for women than for men, also hold for second generation immigrants, and whether there are significant ethnic origin differences in this respect.

## 5.2 Theoretical background

*The 'scarring' effect of parental employment on employment opportunities in adulthood*

The questions of whether employment impacts future generations, and the extent to which this relates to ethnic stratification, have been little addressed in the literature. Explanations on the mechanisms driving the inter-generational transmission of (un)employment are contested. On one hand, one could defend the idea that there is something derived from parental unemployment that affects their descendants' opportunities in education and the labour market. On the other hand, one could also argue that parents and children share similar characteristics which are likely to increase the risk of unemployment of the latter in adulthood (Zwysen 2016). To explain differences in employment I test the first explanation on the consequences derived from parental unemployment, moving away from accounts based on the idea of a culture of worklessness transmitted over generations.

I argue that the link between parental and children's employment status is driven by four mechanisms. First, parental unemployment or non-participation in the labour force is likely to result in financial constraints for the family. Material hardship increases considerably if both parents did not work at respondents' young ages —i.e. constituting a workless household—, ultimately affecting their children's opportunities in their early adolescence, a key stage for their personal and academic development. Second, parental unemployment might also involve psychological costs for both parents and children, especially if it persists over time (Burchell 2011; Fryer 1992). For children and young adolescents, higher levels of stress might lead to lower cognitive ability and worse academic performance, as well as lower self-esteem and confidence. Third, another important mechanism for the inter-generational transmission of worklessness is the lower level of information and networking derived from parental non-

participation in the labour market. Jobs are often found through family, friends, and related contacts. Respondents' access to employment is likely to be affected by the 'quality' of information and networking derived from the social capital their parents form at the workplace in their daily interactions with colleagues/employees and employers. Parental unemployment has therefore informational and networking costs, which might potentially affect negatively the employment opportunities of their descendants in the future. Finally, parental unemployment might change the perception of being out of work, which might also be transmitted to their descendants. The latter would be more prone to perceive unemployment as a more salient option compared to those who did not experience parental unemployment whilst growing up (Zwysen 2016).

Recent research on the UK using data from *Understanding Society* has found for the majority of the population that among men, other things constant, a non-working father at a young age, compared to a working one, is associated with a 14-percentage points employment penalty in adulthood, independently of the occupation of the latter (Zwysen 2016:28). In this line, Li and Heath (2016:180) also find, for the UK, inheritance of worklessness among men. Other results that confirm the notable scarring effects of parental worklessness on the employment opportunities of their descendants are also found by Blanden, Gregg, and Macmillan (2013:558).

*Parental employment status and immigrants' disadvantage at labour market access*

Research in migration often finds, on one hand, narrowing (or even positive) gaps in educational and occupational attainment between the second generation and natives; and, on the other, persisting disadvantage in employment despite the higher average educational attainment of the former (Li and Heath 2016:162). Employment gaps represent, moreover, important challenges for the occupational mobility of the second generation both in the short and the long run.

Parental worklessness whilst growing up is likely to be negatively associated with employment outcomes in adulthood. The parental work status has been rarely used to explain ethnic penalties in employment, despite the higher probability of ethnic minorities to grow up in a partly or fully-workless household. As we have observed in the previous chapter, second generation immigrants are overwhelmingly represented in households with a non-working mother compared to natives. This is clearly the case for Bangladeshis and Pakistanis, and to a lesser extent Indians. Some groups, or sub-groups within them, might be also over-represented

in households with a non-working father or in which none of the parents worked. This disadvantage at origin in terms of parental worklessness might result in a lower probability for the second generation in accessing employment, as well as in translating their comparatively higher educational attainment into a matching job. Moreover, apart from explaining ethnic differences in employment additively, parental worklessness might also affect persons with different ethnic origins differently than natives in their likelihood of accessing the labour market.

Educational attainment is expected to be a key factor reducing the risk of unemployment, both mediating and moderating the effect of parental work status on employment. Worklessness at origin is associated with worse school performance and greater difficulties in translating higher educational achievement into labour market success. The latter might be even more difficult for ethnic minorities. Zwysen and Longhi (2016) report significant employment penalties for immigrants and their descendants among graduates in the UK. Thus, although unemployment is high among people with less education, employment gaps between foreign and native-born immigrants and natives remain among those with tertiary education (OECD/European Union 2015).

I expect age inequalities in employment. In terms of composition, as I show in the second chapter of this thesis, ethnic minorities present substantially younger age distributions than natives. These compositional differences in age between the second generation and natives are likely to explain part of the observed ethnic penalties in employment. Brinbaum and Issehnane (2016) find that ethnic minorities in France (especially the second generation of Maghrebi origins) are more likely to experience higher unemployment in the first years of their working lives, taking more time to find their first job than natives. Moreover, according to the findings of the authors, the amount of time doubles if we consider their first permanent position instead. It is important to test how ethnic minority penalties in employment change across the age range. First, because ethnic minorities are more likely to be over-represented at the lower end of the age distribution; and second, because they are more prone to encounter greater difficulties than natives at early stages of labour market entry.

*The classical attainment model and the role of migration status/ethnic origin*

The second part of this chapter concentrates on occupational attainment. Both migration status and ethnic origin add complexity to the Blau and Duncan's (1967) seminal "Origin, Education, and Destination (OED)" attainment model on the direct and indirect —i.e. mediated by

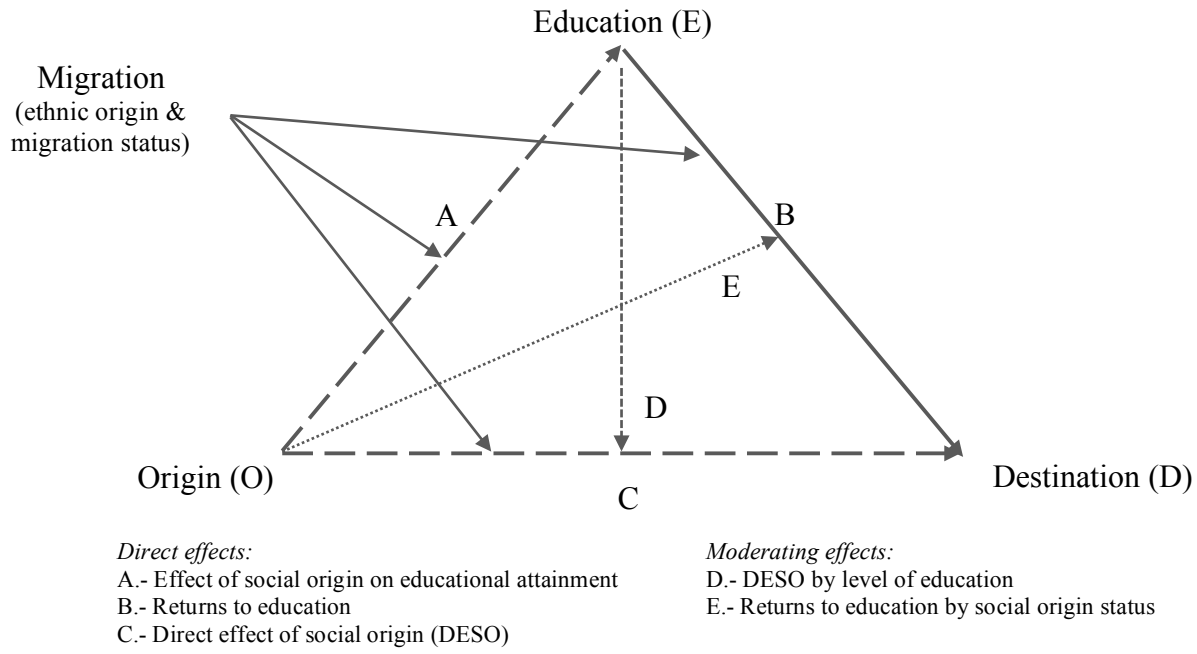
education— effects of social origin on occupational destinations (Heath, Rothon, and Kilpi 2008). Moreover, as Heath and Li (2015) point out, authors such as Hout (1988) or Torche (2011) have also expanded the original model arguing about the necessity of including 'moderating effects'[75] (see *graph 5.1*). These additional effects describe two important aspects in order to fully understand how the process of status attainment works.

On one hand, regarding the moderator effect of social origin on the relationship between education and destination, middle/upper class families might compensate the modest educational attainment of their offspring by mobilizing all the possible economic and non-economic resources at their disposal in order to avoid downward mobility. Persons with a mid/high social background with modest or poor education are likely to perform better in the labour market than those from lower class backgrounds who also lack educational resources. On the other hand, the moderator effect of education on the relationship between origin and destination implies that the effect of class background on labour market performance is lower among the highly educated. A person with a university degree might therefore achieve a high occupational attainment in equal terms compared to a person from a mid/high social origin, even if he or she comes from a low social origin. Thus, at high levels of education, we might expect that meritocracy exceeds ascription in the process of finding a highly-qualified job.

Next, I delve first into the effects of social origin and education on destination, and describe the mechanisms involved in these associations contextualizing the explanation in the UK context. I also comment on how attainment models can contribute to the explanation of the occupational attainment process of second generation immigrants. I identify migration and ethnicity as moderator effects, and discuss in which ways they might alter the relationships outlined in the core attainment triangle in *graph 5.1* —i.e. represented by the three arrows departing from 'migration' in the graph: O(M)E, E(M)D, and O(M)D.

[75] In *graph 5.1* below I depict moderating effects with thinner dashed lines.

*Graph 5.1 The O(M)ED diagram*




Source: Adapted by the author from Li and Heath (2016) and Bernardi and Ballarino (2016).

*The effect of social origin on attainment and the UK context*

Intergenerational mobility research (IMR) is mainly concerned with whether and how social origin affects the life chances of individuals (Whelan et al. 2012). Many studies have found for most European countries a strong effect of social origin on educational and occupational outcomes (Erikson and Goldthorpe 1992; Li and Heath 2014). A priori, people from a higher social origin are expected to perform better in education and the labour market than those coming from less advantageous positions. As a general sociological rule, people tend to avoid downward mobility in terms of class, and families seek to at least reproduce their class position in the next generation using different material and non-material assets at their disposal (Goldthorpe 2000).

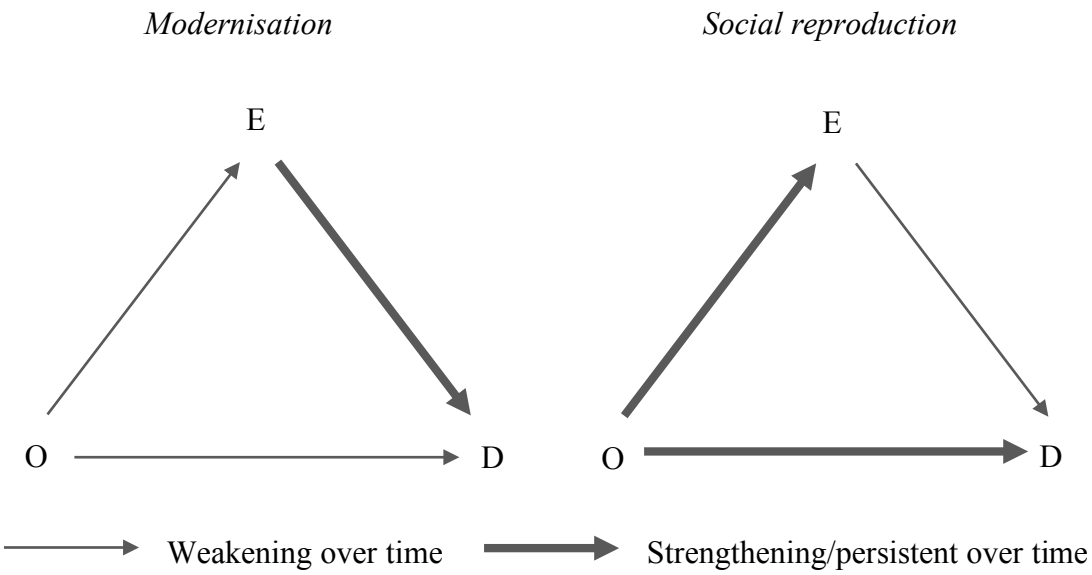
Different aspects related to the family of origin might explain individuals' life-course outcomes: the transmission of (1) cultural capital —i.e. fostering their offspring's educational values and attainment—, (2) income/wealth —i.e. investing on their offspring development within, but also outside formal education—, (3) social capital —i.e. positioning their offspring in 'favourable' social networks—, and (4) relative aspirations/beliefs —i.e. influencing their

offspring's decisions/choices, as different impulses are needed to reach similar outcomes across social classes (Cebolla-Boado 2007). As we know from comparative studies on social stratification, in the United Kingdom there is both high-income inequality and low intergenerational mobility compared to other European countries (Smeeding, Erikson, and Jäntii 2011). We should therefore expect a sizeable effect of social origin on labour-market outcomes in the UK[76], mainly through the four mentioned channels.

The main debate in the fields of social stratification and intergenerational mobility refers to the relative weight one attributes to ascription and merit to explain people's socio-economic performance and attainment. We can differentiate between two main competing theoretical approaches: modernization/universalism and reproduction theories (see *graph 5.2*). While the former takes a more meritocratic stance and defends the view that educational achievement or merit is the main driver of status attainment and social class mobility; the latter argues in favour of the existence of inequality of opportunity, which basically implies that ascribed characteristics remain prevalent in predicting one's socio-economic position. Several authors have also demonstrated that persons from a less advantageous social origin are required to show more merit than those coming from a more advantageous one in order to reach similar socio-economic positions —i.e. the lower the social origin, the higher the merit. It seems that the effect of social origin cannot only be thought additively with merit, but also interactively.

[76] Some studies have shown that in the UK access to the service class among people with similar levels of education is highly influenced by their social class of origin. Coming from a service class family provides a 14 percentage points advantage in accessing the service class (Bernardi 2012).

*Graph 5.2 Representation of the main theories on intergenerational social mobility*




Notes: The thickness of the arrows indicates the strength of the relationship.
Source: Adapted by the author from Jackson et al. (2005).

Social origin explanations of labour market differentials belong to the theoretical tradition of social reproduction. The effect of social origin on labour-market outcomes can be conceptualized as either direct or indirect (Blau and Duncan 1967). While the indirect effect of social origin on later life-course outcomes works through the positioning of individuals in education (arrow A in *graph 5.1*), the direct effect refers to non-educational factors transmitted by the family[77] irrespectively of one's level of education (arrow C in *graph 5.1*) (Boudon 1974). Thus, a direct effect refers to the role social origin plays in explaining destination outcomes over and above the mediation of education, or the process of intergenerational transmission of disadvantage even when two individuals have the same levels of education (Bernardi and Ballarino 2016). Boudon (1974) argues that we can identify an independent effect of social origin that influences decision-making by setting a particular costs-benefits structure. While several stratification studies have confirmed the existence of an indirect effect of social origin on labour-market outcomes through education —i.e. the extent to which mobility patterns are

[77] Such as ability, aspirations/expectations, resources, values, and networks.

explained by educational achievement—, less have focused until recently on its remaining direct effect (Ermisch, Jäntti, and Smeeding 2012; Mastekaasa 2011)[78].

The DESO operates mainly through five different channels. First, direct transmission of economic assets or family businesses. Second, access to family networks, which often provide relevant information related to finding a job. Third, the transmission of non-cognitive or soft skills, which are highly valued in certain professions and economic sectors. Fourth, different career aspirations on top of the level of education achieved driven by the motivation to preserve the privileges at origin. Fifth, employers' favouritism towards persons from higher social origins on top of credentials/skills and through class signalling (Bernardi and Ballarino 2016:269–72).

Social class of origin advantage can be thought to be more or less influential depending on one's level of education, with the former being conditional on the latter (arrow D in *graph 5.1*). The DESO on destination is often expected to be weaker for people with a university degree, and stronger for the less educated (Hout 1988; Smeeding et al. 2011), as the labour market for the highly educated is expected to be based more on merit than ascription (Breen and Jonsson 2007; Breen and Luijkx 2004). Staying longer in education delays labour market entry, and from a life-course perspective, the older you are the weaker is the direct influence of your parents. Direct advantages related to social origin over and above one's education should decline as a function of the level of education one achieves. Contradicting the idea of a linear prediction, some authors have however found a u-shaped pattern of parental influence of one's social origin along educational attainment categories. In this way, we might find a stronger DESO among those with high and low levels of education, and weaker among those with upper-intermediate levels (i.e. degree), who we could consider to be more meritocratic (Torche 2011).

Some authors question the equalizer effect of education arguing, among other reasons, that relative returns to education[79] (arrow B in *graph 5.1*) have decreased exponentially, especially for those cohorts that have accessed the labour market more recently. Educational expansion, and more particularly the expansion of the upper secondary system, has resulted in a process of credentials inflation, leaving space for the direct influence of social origin on top of education (see arrow E in *graph 5.1*).

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[78] In migration studies, the existence of between and within ethnic origin group differences with respect to direct and indirect effects of social origin is under researched.

[79] While absolute returns to education refer to the percentage of people with a particular educational level in a specified class position; relative returns refer instead to the comparison between the proportion of people with a given educational level who reach a particular class position, and the equivalent proportion of those with a different educational level (Bernardi and Ballarino 2016).

Returns to education tend to be higher on average for people from high social origins as they often have better grades, go to better universities, and have higher levels of soft (or extracurricular) skills which are highly valued by employers. Given similar certifications, people from higher social origins are more likely to take advantage in front of employers of the signalling aspect of education. For people coming from a low social origin instead, an extra effort is often required to obtain similar returns to education than people from a higher one. Those coming from a low social origin who obtain a high educational level are therefore likely to be positively selected on less easily observable characteristics, such as ability and motivation, which are rewarded in the labour market.

Another important discussion refers to the inclusion of parental unemployment as an extra category of the variable social class of origin (Platt and Thompson 2006). I include it, as it is important for accounting for the labour market situation of immigrant parents, for whom we expect a higher probability of being unemployed, although with significant variation across ethnic-origin groups. We might also expect maternal labour market discrimination or non-participation to be important, especially at the bottom of the social class distribution for its ability to reduce poverty, due to its high marginal effect on the aggregated household income.

The impact of social origin on labour-market outcomes is also expected to vary by gender. Many studies have shown that the direct effect of social origin on labour-market outcomes is stronger for men. There are several explanations for this process. The three main ones are that women are more likely than men to achieve a higher destination through marriage, present a stronger self-selection into employment, and the labour market has a gendered structure which often leads to a ceiling effect for women (Ballarino et al. 2009; Vandecasteele 2016).

In her recent study, based on data from the British Household Panel Survey, Vandecasteele (2016:232) concludes that for the majority of the population in the UK there is a direct association between social origin and destination (measured as the ISEI score in the first and current job). As expected, the DESO is stronger for men than for women in the UK, and weaker among higher educated people. The author argues that part of the effect of social origin works through education with people from higher social origins achieving on average higher levels of education. In this direction, the author argues that in the UK educational expansion benefited more people coming from higher social origins. In fact, when considering net monthly income as a dependent variable, the author finds that education totally mediates the social origin effect.

*Migration-specific factors for the intergenerational transmission of (dis)advantage*

While the direct and indirect effects of social class of origin on labour-market outcomes have been increasingly tested in social stratification research for the majority of the population, differences between immigrants and natives in this regard, as well as within ethnic-origin groups, have been more rarely studied (Zuccotti 2014). Despite having a common concern, that of testing for equality of opportunity, meritocracy, and ascription, mobility studies —focusing on social reproduction— and ethnic/immigration research —focusing on ethnic penalties— have remained apart in explaining labour market differentials between immigrants (and their offspring) and natives. As a result, there are few studies addressing the effect of social origin on destination among individuals with a migration background in host societies, as the majority has not prioritized social origin explanations to account for ethnic disadvantages in the labour market (Heath and McMahon 1999). There exists therefore a gap in the literature on the intersection between social and ethnic origins (Platt 2007).

Apart from more substantive causes, one practical explanation might be that the post-migration social class of origin of second-generation immigrants has been difficult to measure due to data availability and constraints (Mastekaasa 2011), but also to the fact that in the majority of European countries the labour market incorporation of the native-born children of immigrants is a recent, if not still on-going, phenomenon. There are however exceptions in different receiving countries. The Jamaicans in the United Kingdom are an example. They first arrived to the country mostly around the 1950s, and now present a larger second, and even third, generation compared to the rest of ethnic-origin groups in the country. This is also the case, even to a larger extent, of Irish. France, another old migration country, is another example with exceptions in this regard, for instance the case of Algerians.

In this second subsection, I refer to the three arrows coming out of the category 'migration status/ethnic origin' in *graph 5.1* above, which point to the moderating effect of migration and/or ethnic origin on the OE, ED, and OD associations. Migration is most of the time a disruptive process. Therefore, migration status and ethnic origin can be seen as a potential modifier of the effect of social origin on educational and labour-market outcomes, i.e. it is plausible to expect class (dis)advantage to operate differently across ethnic-origin groups and immigrant generations (Heath and McMahon 1999; Zuccotti 2014). On this last point, Hout (1988, 2015) argues that the advantages/constraints of social origin differ depending on the subpopulation we study, as social origin has a weaker/stronger impact on labour market performance and achievement for some groups than other. It can be stated accordingly that

migration status represents a moderating effect embedded in the classic Origin, Education, Destination (OED) model, although there is still no conclusive evidence in this regard in the literature.

Some studies have found that native-born children of immigrants in the UK are more upwardly mobile than British, and they tend to behave more meritocratically. Thus, second-generation immigrants are expected to rely more on education, and consequently to depend less on social origin compared to natives (Heath and McMahon 2005; Platt 2007).

Using Understanding Society, Zuccotti (2014) finds that accounting for social origin generally favours ethnic minorities, as it either reduces the penalty in occupational attainment for some groups, or it widens the positive gap for other. As the author points out, this second process implies that among those with a low social background, ethnic minorities have certain advantage compared to natives. Bangladeshi women and Africans are however an exception. For the former, a penalty in accessing the service class persists after controlling for social origin, while for the latter there is a penalty associated with higher social origins. To the question of whether social reproduction behaves similarly across ethnic origin groups, the author concludes that different answers apply depending on the group. On one hand, Indians and Bangladeshi men, and immigrant origin women in general, closely resemble the reproduction pattern of their native counterpart. On the other, Pakistani, Caribbean, and African men coming from a high social origin and with a university degree are more penalised in terms of attainment than natives with similar characteristics.

Findings could however be driven by an underestimation of the 'true' class position of the first generation. Thus, although some studies are moving in this direction, we rarely observe the contextual education/class attainment of the first generation, i.e. the relative position in the education/class structure at origin (Feliciano and Lanuza 2017; Ichou 2014). Related to this, one of the explanatory factors of intergenerational mobility in the case of immigrants could be the higher level of motivation, aspirations, and transmission of educational values from parents in lower social classes compared to native parents in the same socio-economic stratum. Thus, immigrant parents often use their class and education position in their country of origin as a benchmark (Feliciano and Lanuza 2017:214).

Migration is usually a long-term family project involving several generations (Heath et al. 2008). Among the migrant generation and its descendants, due to selection plus the logic of their involvement in this broader family endeavour, the established sociological rule of social reproduction or avoidance of social demotion might work differently. The main goal of the migrant generation is often that their children outperform them in the labour market, and not

'only' that they reproduce their class position, in order to escalate positions in the social ladder. For the second generation we should expect a re-adjustment of the class structure, as the class distributions we observe at arrival might not be 'realistic'. Second generation immigrants in the UK tend to present a bimodal distribution in terms of class of origin when compared to natives. On one hand, for second generation immigrants coming from lower classes we might expect a weaker effect of social origin compared to that for natives in a similar position due to the downgrading class position in the first generation. On the other hand, ethnic minority members coming from more privileged backgrounds are often more likely than natives to encounter more difficulties in transmitting advantage across generations. For second generation immigrants in high classes we might therefore also expect a weaker effect compared to similarly positioned natives due to stronger disadvantages (driven e.g. by a lack of social capital and/or weaker signalling of credentials) at access to the salariat.

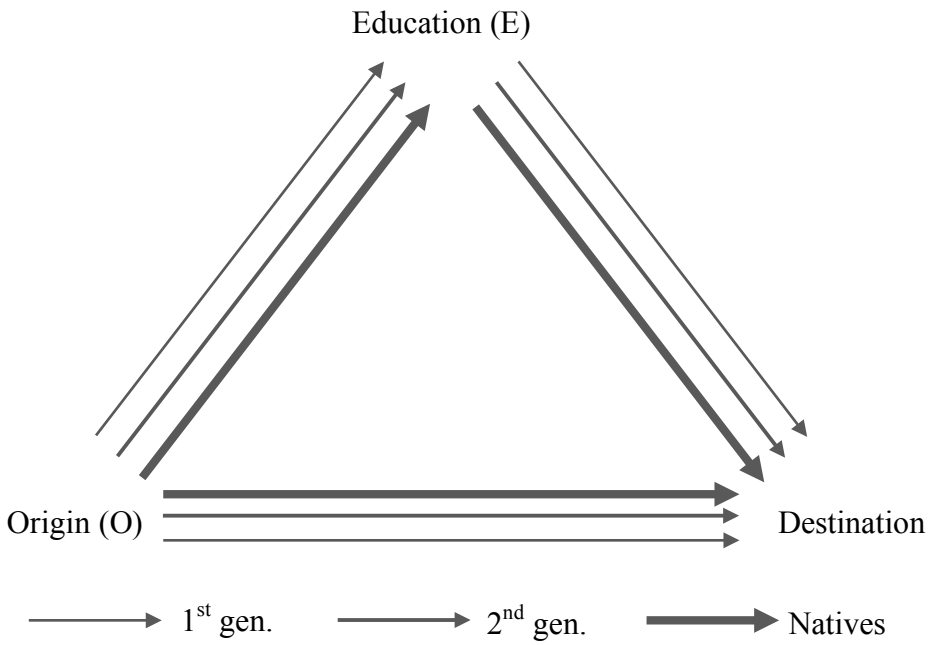
The migrant generation often goes through a devaluation of human capital and a process of deskilling (Friedberg 2000), that usually leads to a suppression of the 'true class position'. This process might be reinforced by a lack of both cultural and social capital, as their value decrease in the receiving country (Becker 2010). From this initial disadvantage suffered by the migrant generation we can expect two opposite processes operating for the offspring: either an amelioration involving a reassertion of the latent or 'true' class position of the parents after the initial suppression (Platt 2005, 2006, 2007); or a cycle of cumulative disadvantage in the second generation (Carmichael and Woods 2000; Iganski and Payne 1999; Kalter and Kogan 2002). Moreover, the immigrant offspring might experience more difficulties in securing an occupational position matching their level of education due to different factors such as over-optimistic expectations or employer discrimination (Duncan and Duncan 1968).

On the other hand, mid/highly-educated second generation immigrants, might face problems in transferring their human capital into the labour market, obtaining therefore lower returns to education than natives. Differences between natives and second generation immigrants in attainment might also accentuate among those with graduate/postgraduate studies. Apart from direct discrimination, second generation immigrants are more likely to face problems related to signalling. Thus, compared to natives, they have on average a more limited access to contacts and information regarding employers' most highly-valued educational programmes, credentials, and institutions. Moreover, we can also argue that immigrant families of higher social origins might encounter more difficulties in transferring 'useful' non-cognitive skills to their offspring (even if they might possess more non-cognitive skills than similarly positioned natives due again in part to positive selection) as a result of their lower knowledge

about the implicit cultural norms and valued abilities in professional and managerial positions in the host society. In this sense, non-cognitive abilities are a factor that many authors identify as a key contributor to the intergenerational transmission of class advantage in the labour market, especially in the framework of a credential inflation process (Mastekaasa 2011).

There might also be (cultural) factors specific to immigrants, or to some ethnic-origin groups and not others, that can potentially explain differences in behaviour and ultimately the transmission of class (dis)advantage (Polavieja 2015). I argue that a key factor is maternal labour-force participation (Carmichael and Woods 2000). On this respect, significant differences are observed across immigrant groups (as seen in the previous chapter). Traditionalism hinders the participation of women in the labour market resulting on a higher probability for the offspring of coming from a single-earning household —or, in the worst-case scenario, a workless household—, and consequently limiting the financial and networking resources of immigrant families irrespectively of their class position. We might expect however single-earning households to have a weaker marginal effect at the top of the social class distribution of origin, and a stronger one at the bottom. Other ethnic origin specific explanations also highlight the importance of community factors such as the creation among ethnic-origin groups of job networks, a higher preference for self-employment/entrepreneurship, or the creation and reproduction of an ethnic-niche economy.

*Graph 5.3 OED effects by migration status*




Notes: The thickness of the arrows indicates the strength of the relationship.
Source: Adapted by the author from Heath and Li (2015).

To sum up, there are reasons to expect parental work status and social class to affect immigrants and natives in different ways, although it might also be the case that conversely we do not observe any difference, or only for some ethnic-origin groups. We need to test whether immigrants are more or less dependent on social class of origin than natives when accessing the labour market and attaining a particular occupational position. We should be aware, at the same time, that the 'true class position' of immigrant families might be altered in the first generation, and therefore a weaker effect of social origin, if observed, could be in part related to this (see *graph 5.3*).

## 5.3 Analytical strategy

*Variables and sample*

The two dependent variables of interest are employment status and occupational attainment. Employment status is operationalized with a dummy variable with 1 being 'employed' and 0 'unemployed'. Analyses are conditional on activity, as both immigrant and ethnic differences in activity with respect to natives have been already studied in the previous chapter. The other

dependent variable, occupational attainment, is operationalized by means of a three-class version of the National Statistics Socio-economic Classification (NS-SeC)[80] —i.e. 1 'managerial and professional' 2 'intermediate' 3 'semi-routine and routine', with an extra category for unemployment. I also operationalise attainment using the International Socio-Economic Index of Occupational Status (ISEI) as a robustness check[81]. A categorical approach of social class provides however a more detailed insight as different processes are likely to operate at different levels of the labour market (Heath and Cheung 1998). The analyses on occupational attainment are also conditional on activity. To define one's occupational position, I also consider unemployed persons at the time of the interview and take their previous occupational position for up to a maximum of 10 years before the interview date —i.e. I follow a last job approach.

The main independent variables tested are parental work status and class position. Parental work status is a categorical variable with four categories: 1 'Dual-earning household', 2 'Not working mother', 3 'Not working father', and 4 'Workless household'. The first category refers to households in which both parents worked, i.e. had a paid job, when the respondent was 14. The second and the third categories refer to single-earning households, in which either the mother or the father worked respectively. To the extent possible, I keep these two categories separate as I expect a different effect by gender on employment and attainment opportunities. The fourth category, 'workless household', refer to a household in which neither the father nor the mother worked whilst the respondent was growing up.

To define the parental class position[82] I use the parental occupation whilst the respondent was growing up, in this case the three and five-category versions of the National Statistics Socio-economic Classification (NS-SeC) depending on the nature of the analyses. Together with social origin and parental work status, education is the other main predictor in the analyses of employment and attainment. I operationalise it in the same way as in the previous chapter. For specific analyses though, I collapse it into a dummy variable with 0 being 'no degree' and 1 'degree'. Another explanatory variable of interest in the models is age, often used as a control variable in migration research, although I argue it has important implications for understanding the labour market disadvantage of the second generation.

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[80] This classification is the most commonly used in occupational attainment and mobility research in the United Kingdom (Dean and Platt 2016).

[81] Results not reported.

[82] To construct parental class I use a dominance approach by considering the highest occupation between the two parents as the parental one.

*Methodology*

To have enough cases for different ethnic-origin groups, and maximise within-group variation, I pool data from the first four waves of *Understanding Society*. The first four waves of the study refer to years 2009-2014, a period characterized by the economic recession. For the analyses on employment I use additive and interactive linear probability models, and for occupational attainment I use additive and interactive multinomial logistic and logistic regression model specifications for the dependent variable based on the NS-SeC classification, and OLS regression models for ISEI —as the latter is a continuous variable ranging from 16 to 90 in the sample. In both cases I adjust for the fact that the results obtained are from a sample with repeated observations on the same individual by estimating robust standard errors clustered by personal ID. To ease the interpretation of the results I estimate and plot average adjusted probabilities (APPs), average marginal effects (AMEs), and marginal effects at representative Values (MERs) based on the work of Mood (2010) and Williams (2012) among other. Moreover, all results, except descriptive and bivariate, are weighted.

**5.4 Results: the effect of parental work status on employment**

*Descriptive and bivariate results*

Overall the second generation is less likely to be employed than natives. Employment penalties differ however by gender and ethnic origin. Women have on average higher employment rates than men due, as we have seen in the previous chapter, to their higher selection into activity. Among Pakistani, Bangladeshi, and Indian women, this is however not the case. Thus, even if they have the lowest labour-force participation rates, they are less or similarly employed than their respective co-ethnic male counterparts. In fact, women with Pakistani and Bangladeshi origins experience the highest level of unemployment. Among men, the most disadvantaged are Jamaican (see *tables A5.1* and *A5.2* in the appendix).

In this first part of the analyses, I use the parental work status whilst the respondent was growing up as the main predictor of employment status in adulthood. Variation across ethnic-origin groups is large. Pakistani and Bangladeshi men and women are clearly over-represented in the category 'workless household'. For instance, about half of Bangladeshis grew up in a workless household, while this is only true for 5% of natives in the sample. Among those who grew up in a single-earning household, Jamaicans and Africans have a relatively high

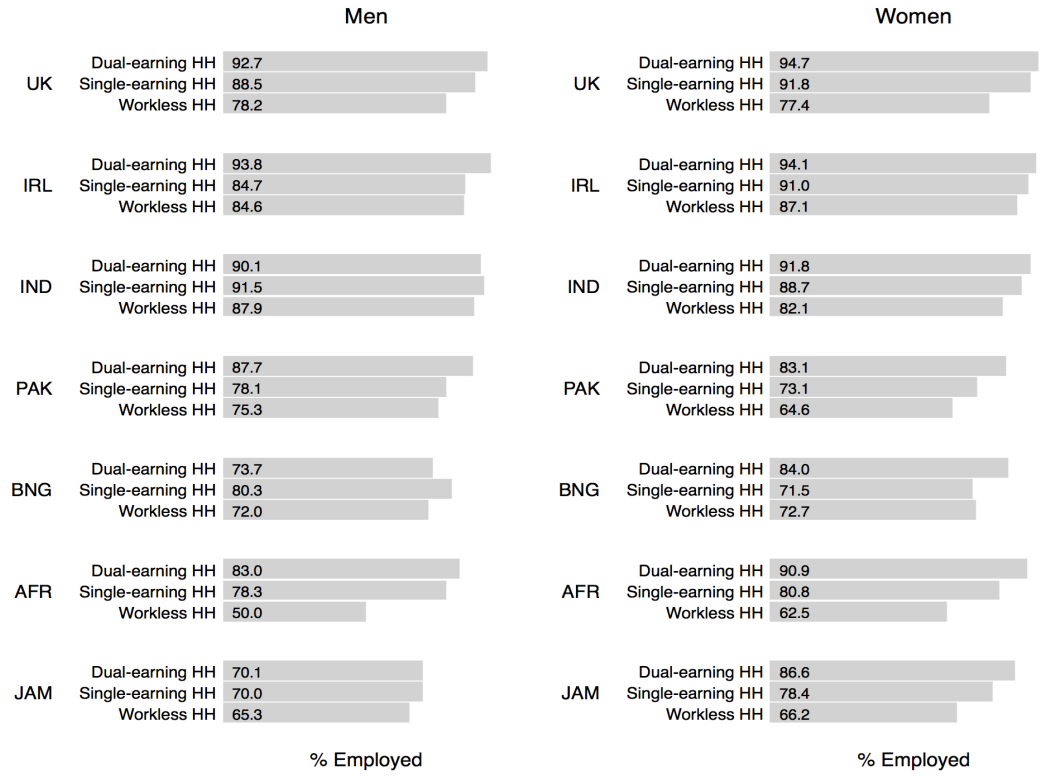
percentage of non-working fathers; while for Pakistanis and Bangladeshis it was mostly the mother, and not the father, who did not work.

Education exerts a protective role against unemployment, working along and on top of social origin. Evidence on the UK has repeatedly shown that second generation immigrants are on average higher educated than natives (Lessard-Phillips and Li 2017; Platt 2007; Wilson, Burgess, Briggs 2011), which is specially driven by a higher achievement of ethnic minorities compared to natives at low social origins (Strand 2014). To the extent this average educational advantage of the second generation compensates for the observed disadvantage in social origin (here defined as parental work status) is one of the main inquiries of this chapter. If we look at the percentage of degree holders in the sample, we observe that, in fact, second generation immigrant women are on average higher educated than native irrespectively of their ethnic origin. Among men, Jamaican and Bangladeshi are the only exceptions with a lower percentage of university graduates than native. Jamaican men are, however, over-represented among those with secondary education (i.e. A-levels & other). At the other end of the education distribution, Bangladeshi men also have a comparatively high percentage of cases with no formal education —about 1 in 10.

Before moving to multivariate analyses, I describe the patterns of association between parental work status[83] and employment and educational attainment. Overall, *graph 5.4* shows that men and women coming from a workless household are less likely to be employed than those who grew up either in a single or a dual-earning one. Employment gaps, conditional on parental work status, are larger among women than men, and vary by ethnic origin. Among women, employment gaps between those coming from a dual-earning vs. a workless household are above 10 percentage points for all groups except Irish. The greatest gaps, of about 30 percentage points, are for African men and women. For Bangladeshi, African, and Pakistani women who grew up in a single-earning household (vs. a dual-earning one), differences are also sizeable. The smallest gaps in employment across parental work status categories are instead for Indian and Bangladeshi men.

[83] For bivariate and multivariate analyses I combine the categories 'not working father' and 'not working mother' into the category 'single-earning household' due to the low number of observations for some groups in these two categories (especially the first one).

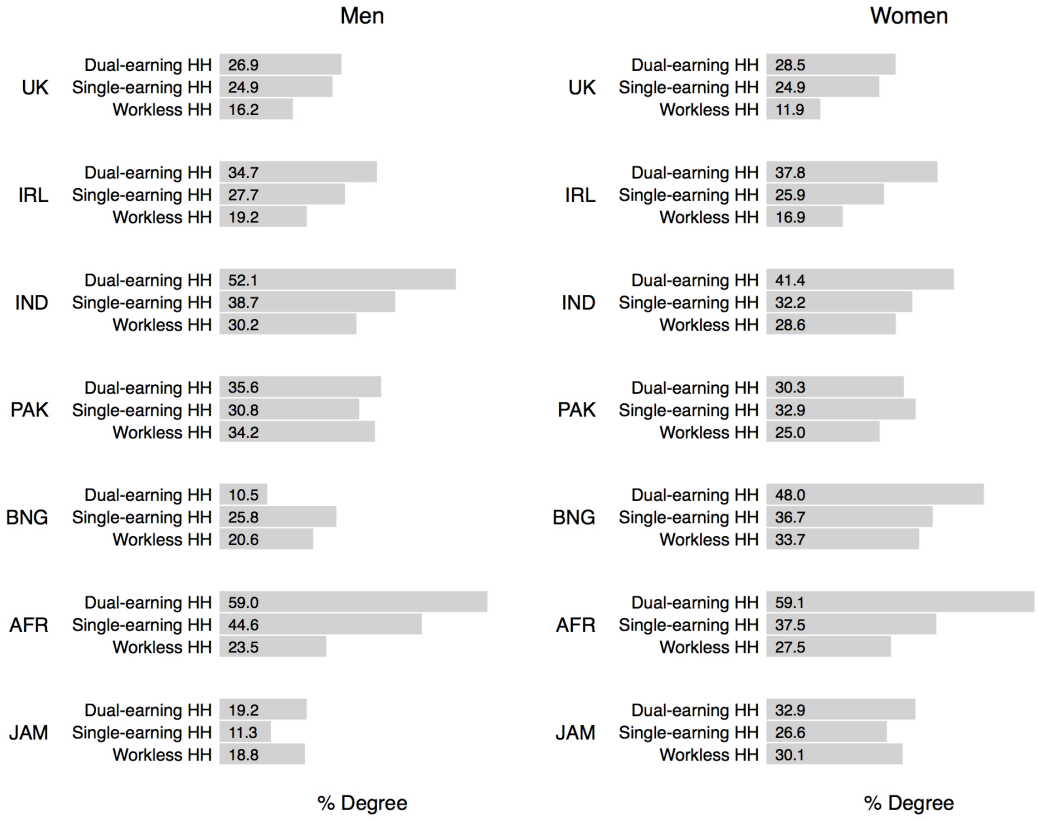
*Graph 5.4 Percentage of employed by parental work status and gender over ethnic origin*




Source: *Understanding Society*, waves 1-4, author's analysis.

As discussed in the theoretical part, education is expected to mediate the origin-destination association. Those coming from either a single-earning or a workless household are a priori expected to achieve a lower educational attainment than those coming from a dual-earning one. This responds to, among other reasons, the lower financial resources of the former. Overall, though, second generation men and women from more disadvantaged origins are more likely to obtain a degree than disadvantaged natives (Strand 2014). This is particularly the case for Pakistani men and Bangladeshi women coming from a workless household. As in the case of employment, in *graph 5.5* we observe different association patterns across gender and ethnic origin categories. Among Pakistanis and Jamaicans, as well as Bangladeshi men, the parental work status does not seem to be related to the acquisition of higher education at the bivariate level. On the contrary, African men and women seem to be the most affected by their parental work status in obtaining a university degree, with gaps of about 30 percentage points between those coming from a workless vs. a dual-earning household. Educational gaps conditional on parental work status are also sizeable among Indians, Irish, natives, and Bangladeshi women.

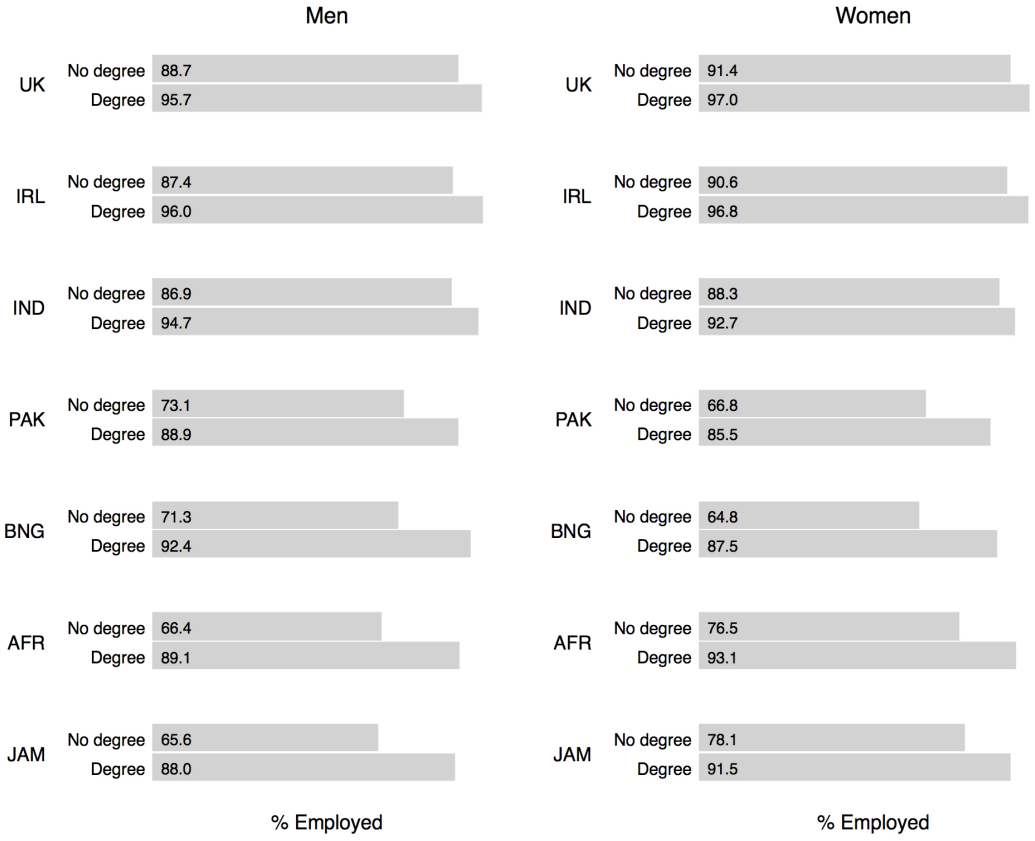
*Graph 5.5 Percentage of university graduates by parental work status and gender over ethnic origin*




Source: *Understanding Society*, waves 1-4, author's analysis.

*Graph 5.6* provides an initial hint on the protective role of education against unemployment and, by looking at within group differences, on whether this is stronger for some groups than others. The employment gap between those who have a degree and those who do not differs markedly by ethnic origin. For natives, Irish, and Indians, employment differences across educational categories are smaller than for the rest of the groups. For the latter a university degree is likely to play a stronger protective role against unemployment. This seems to be the case for African, Jamaican, and Bangladeshi men, as well as Bangladeshi women, with positive employment gaps above 20 percentage points for graduates.

*Graph 5.6 Percentage of employed by education and gender over ethnic origin*




Source: *Understanding Society*, waves 1-4, author's analysis.

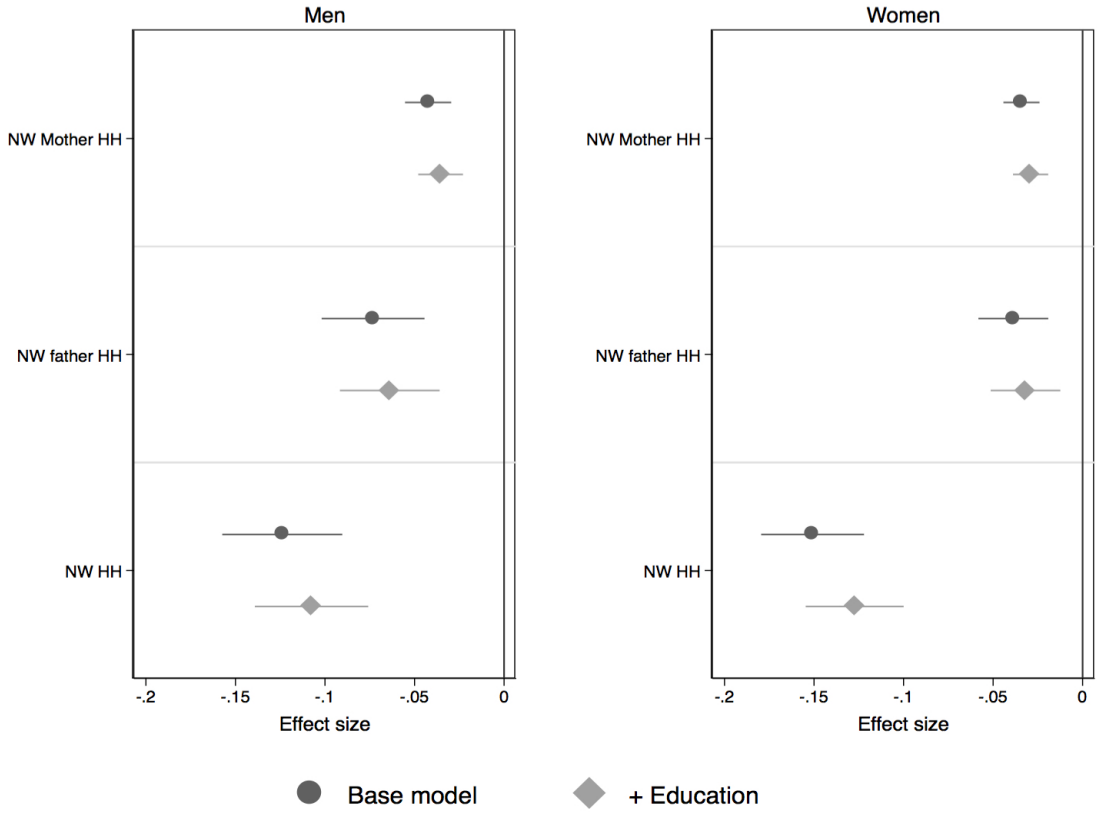
*The role of parental work status and the mediation and moderation of education*

I move now to test the patterns in graphs 5.4, 5.5 and 5.6 above at the multivariate level. Coming from a workless household instead of a dual-earning one is associated with a 12% reduction in the probability of being employed for men, and a 15% reduction for women[84]. As shown in *graph 5.7*, net of educational attainment, the effect remains similar for both men and women, indicating that education mediates only a small part of the relationship of the former with employment status. Having grown up in a single-earning household is also negatively associated with being employed in adulthood, although to a much lesser extent. If we disaggregate the effect of the latter by whether it was the mother or the father who did not work, we observe that for men the effect of having a non-working father whilst growing up almost doubles the size of the effect of having a non-working mother. In the case of women, both

[84] See *table A5.3* in the appendix.

effects are similar and relatively small in comparison to that of coming from a workless household.

*Graph 5.7 Effect of parental work status on the probability of being employed by gender before and after accounting for education. Linear probability models.*

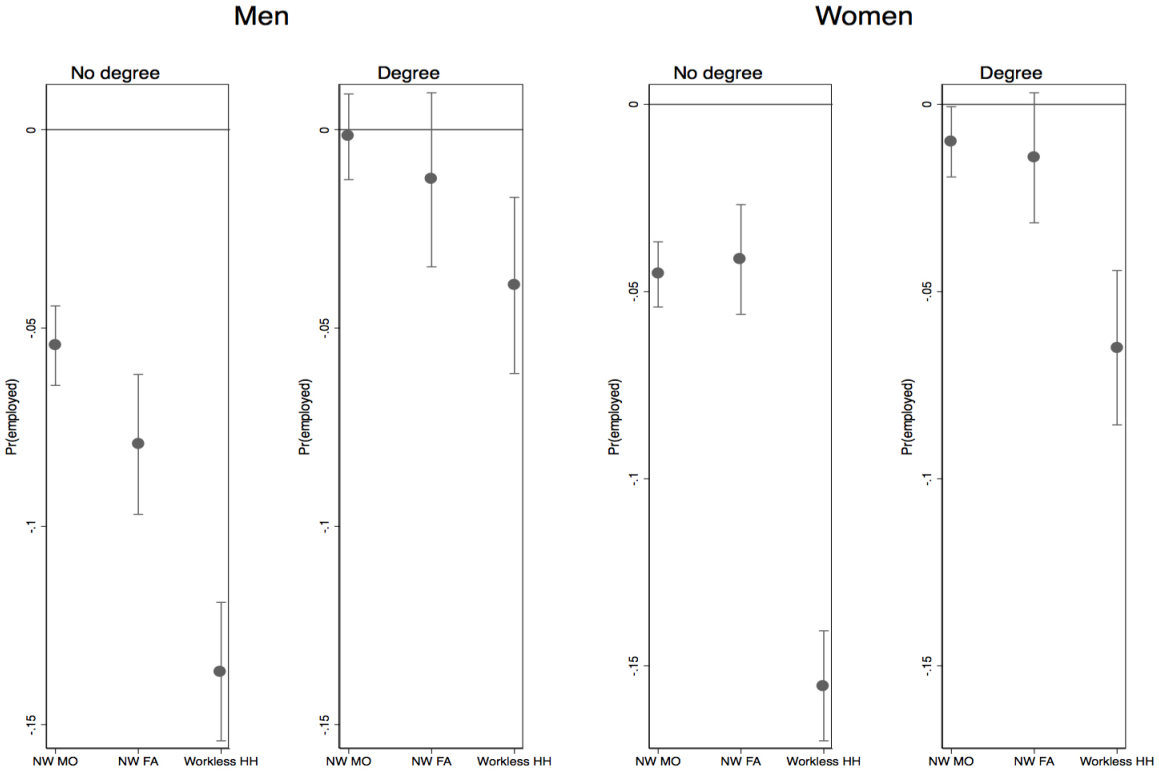



Source: *Understanding Society*, waves 1-4, author's analysis.

A common finding in the literature on intergenerational social mobility is that the higher the educational attainment the lower the influence of social origin on labour-market outcomes. Thus, education is also likely to moderate the origin-destination association. This is indeed the case for both men and women as *graph 5.8* shows. On the left column of each subgraph I report the effect of parental work status for persons without a university degree, and on the right one for persons with a degree. Among men, we observe that coming from a workless household instead of a dual-earning one decreases the probability of being employed by about 14 p.p. for those without a degree, and 4 p.p. for those with a degree. In the case of women, the difference between these two groups is the same, although the effects are stronger —i.e. of 16 and 6%

respectively. For persons with degree-level education, the effect of coming from a single-earning household is not statistically significant, neither for men nor for women. For those without a degree, the negative effect of a non-working father is stronger for men than for women[85].

*Graph 5.8 The moderator effect of educational attainment between parental work status and employment by gender. Linear probability models*



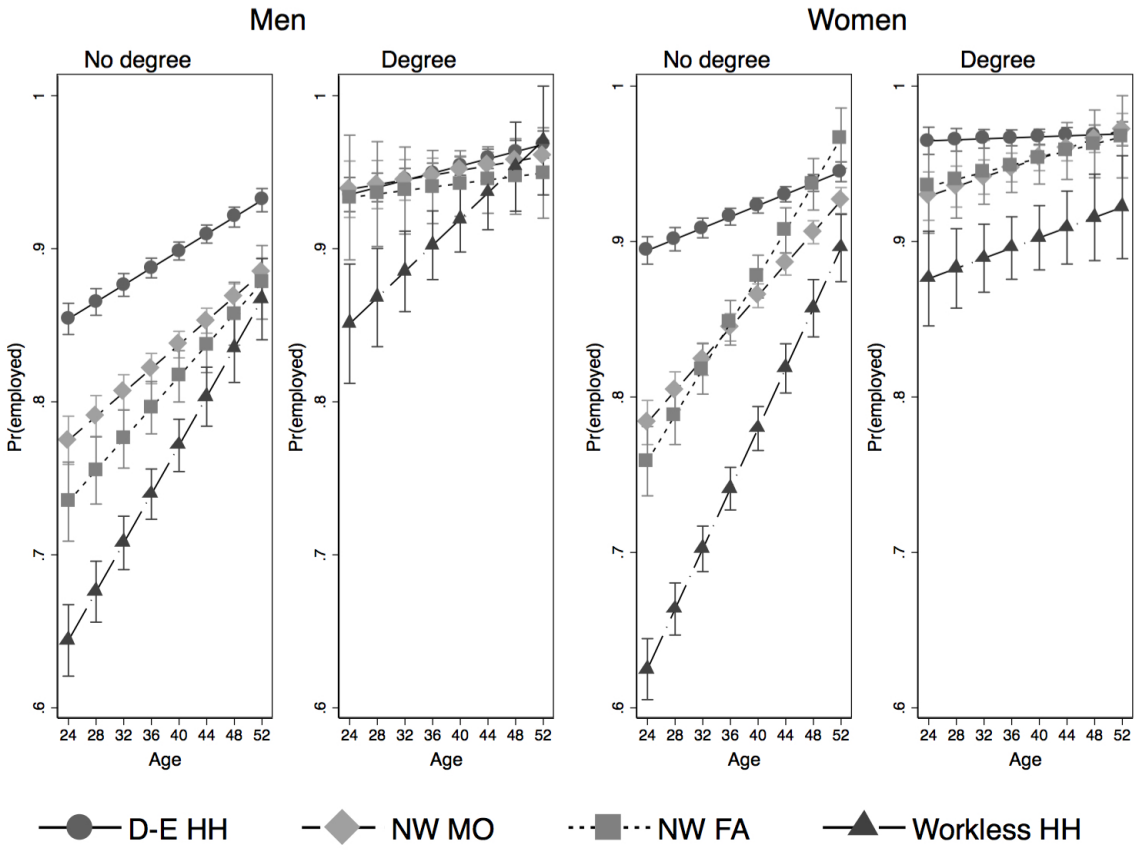

Source: *Understanding Society*, waves 1-4, author's analysis.

Age is commonly identified as another moderator. The older a person gets, the lower the expected effect of social origin on his/her labour-market outcomes. I condition then the effect of parental work status on age. Based on this, in *graph 5.9* I report the probability of being employed for both men and women distinguishing also by educational attainment (degree)[86]. As expected, results confirm that differences in the probability of being employed across the categories of parental work status decrease with age. Nevertheless, among those without a degree, employment gaps between persons coming from a single-earning or workless

[85] See *table A5.4* in the appendix.
[86] See *table A5.5* in the appendix.

household vs. a dual-earning one persist at older ages, especially in the case of men. Age differences also involve however cohort effects, which have implications on the probability of having employment. Thus, for instance, while older generations might have enjoyed more labour market security, flexible measures introduced more recently might have made more difficult the employment stability of younger generations. Moreover, the cohorts that have entered the labour market during the recession are also more likely to be unemployed that the cohorts that secured a labour market position before.

*Graph 5.9 The moderator effect of age between parental work status and employment by degree and gender. Average Adjusted Probabilities, Linear probability models*



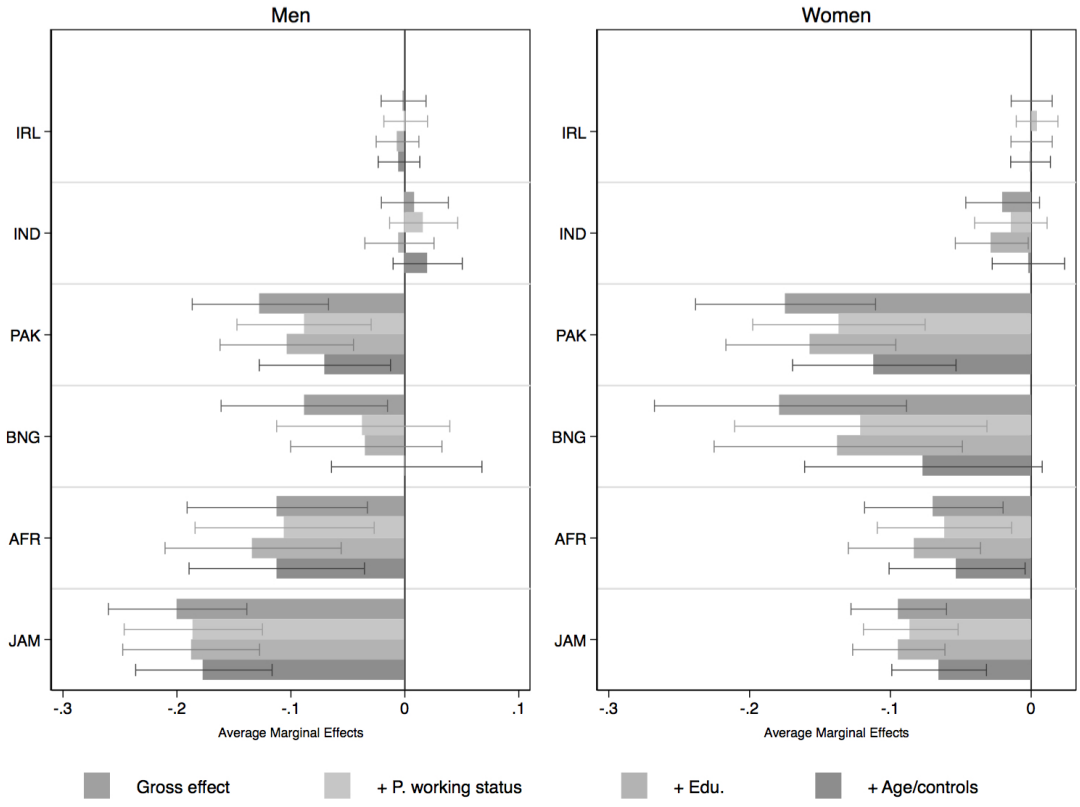

Source: *Understanding Society*, waves 1-4, author's analysis.

*Gross and net ethnic origin employment penalties*

Multivariate results confirm the existence of gross employment penalties by ethnic origin (see *graph 5.10*). These reduce significantly, for both men and women, when accounting for

compositional differences in parental work status, education, and age[87]. Among men, except Irish and Indian, all groups are less likely to work than native. Once I account for the main predictors of interest, penalties reduce substantively for Pakistani and Bangladeshi, although they remain sizeable for both African and Jamaican (i.e. above 15%). Women in the same groups also face employment disadvantage, with Pakistani and Bangladeshi being in this case the most disadvantaged. Ethnic penalties among women also reduce with the introduction of explanatory and control variables. However, despite this reduction, the employment penalty of Pakistani women remains above 10%.

*Graph 5.10 Gross and net ethnic origin employment penalties by gender. Linear Probability models*




Source: *Understanding Society*, waves 1-4, author's analysis.

Parental work status and age explain more variation in respondents' employment status than education. Age inequalities in the risk of unemployment are often reported in the labour market literature. The second generation is significantly younger than natives (e.g. Africans in the UK), and therefore more subject to face age penalties in accessing employment. The effect

[87] Models also control for region and health. See *tables A5.6* and *A5.7* in the appendix.

of compositional differences in terms of age across ethnic-origin groups is not usually discussed in the migration literature, even if these contribute in explaining ethnic penalties in both employment and occupational attainment. I move next to discuss the effects of parental work status, education, and age on the probability of being employed; and test whether these effects differ by ethnic origin.

*Different intercepts or slopes across ethnic-origin groups?*

So far, I have only allowed for the possibility that the effects of the main predictors behave in the same way for the different ethnic-origin groups being compared. As I have argued, the introduction of ethnic origin in the models confirms the existence of different group intercepts —i.e. net penalties in employment. We have also observed (in *graph 5.10*) that by estimating the models with and without education, ethnic employment penalties do not change much. Instead, for some groups, they even increase. The latter indicates that if second generation immigrants were not on average higher educated than natives, they would even suffer a higher employment disadvantage than they actually do. This finding is in line with that of Li (2016) and Fernández-Reino (2016), who state that ethnic minorities aim higher (e.g. attaining more education at similar levels of achievement) not to fall too low in the labour market. In what follows I explore the possibility that the effects of parental work status, education (degree), and age behave differently across ethnic-origin groups by allowing for their slopes to differ for each group individually[88].

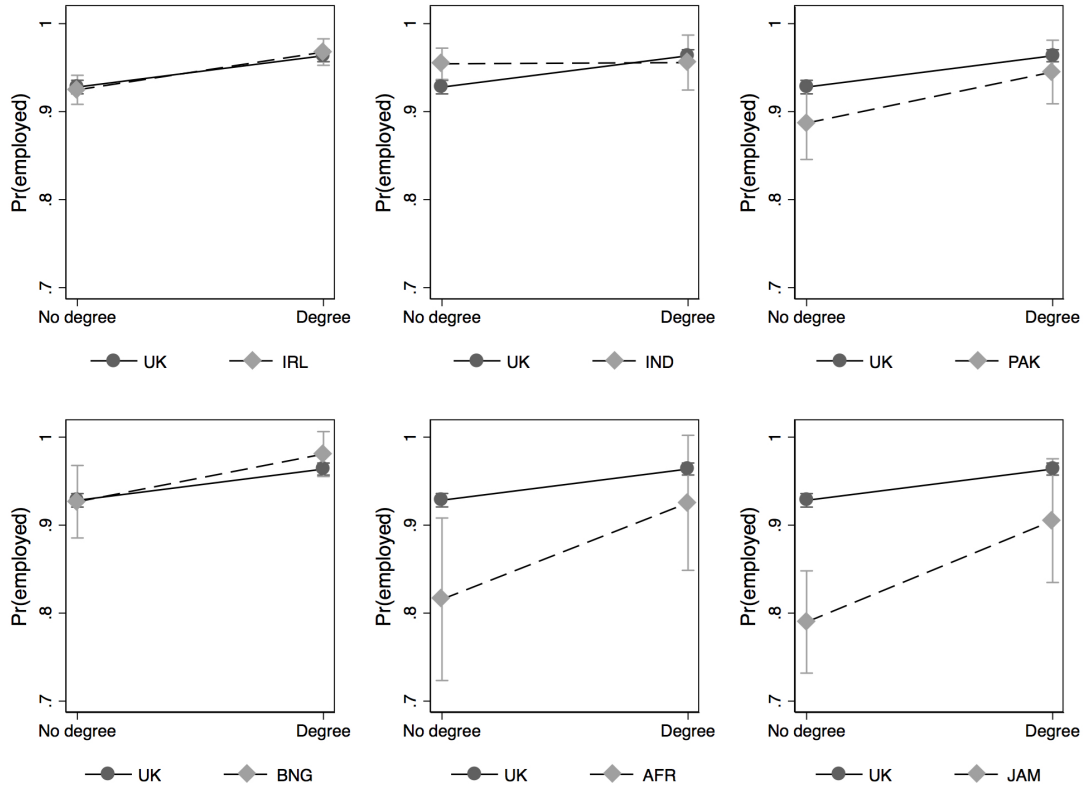
Interaction terms between parental work status and ethnic origin show that, overall, the effect of the former behaves similarly across groups, for both men and women, as the respective statistical significance tests indicate. However, in the case of men, if we look at the size of the interaction effects (and not only their statistical significance), we observe that a workless household at origin penalises African substantively more, while it penalises Bangladeshi and Indian substantively less. In the case of women, the workless-household effect follows a similar pattern for these three groups, and is also weaker for Irish (see *tables A5.8 and A5.9* in the appendix).

The strength of the effect of education on the probability of being employed differs across ethnic-origin groups. In *graphs 5.11* and *5.12* I plot the interaction effects between education (degree) and ethnic origin categories for men and women respectively. Interaction

[88] In the interaction models, I keep the rest of the variables at their means.

results show that among Jamaican and African men those at the lower end of the educational ladder experience higher employment penalties. At a degree level instead, differences with respect to native men reduce significantly. Men in these two groups, but also Bangladeshi[89] and Pakistani to a lesser extent, benefit more than natives from obtaining a degree as far as the avoidance of unemployment is concerned.

*Graph 5.11 Interaction effect between education (degree) and ethnic origin on the probability of being employed. Men*



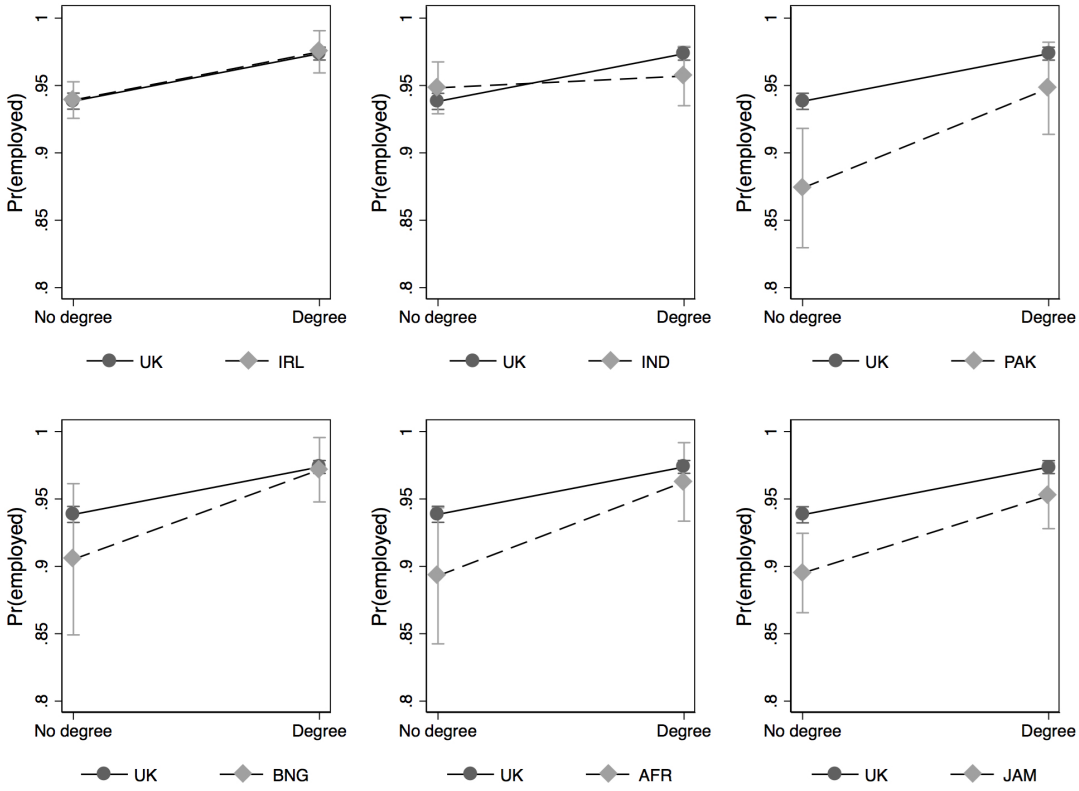

Source: *Understanding Society*, waves 1-4, author's analysis.

Among women, returns to education are comparatively high for Pakistani, who clearly benefit more than native from a university degree in terms of minimizing the risk of unemployment. The effect of obtaining a degree is also stronger than native for Bangladeshi, African, and Jamaican women. For women in these four groups, interaction coefficients are

[89] We must be cautious with the interpretation of the coefficients for some groups —such as Bangladeshis—, as confidence intervals are very large and, therefore, the precision of the estimates low.

statistically significant at either the 90 or 95% levels[90] (see *table A5.9* in the appendix). On the other hand, I do not observe significant differences for Irish and Indian women.

*Graph 5.12 Interaction effect between education (degree) and ethnic origin on the probability of being employed. Women*

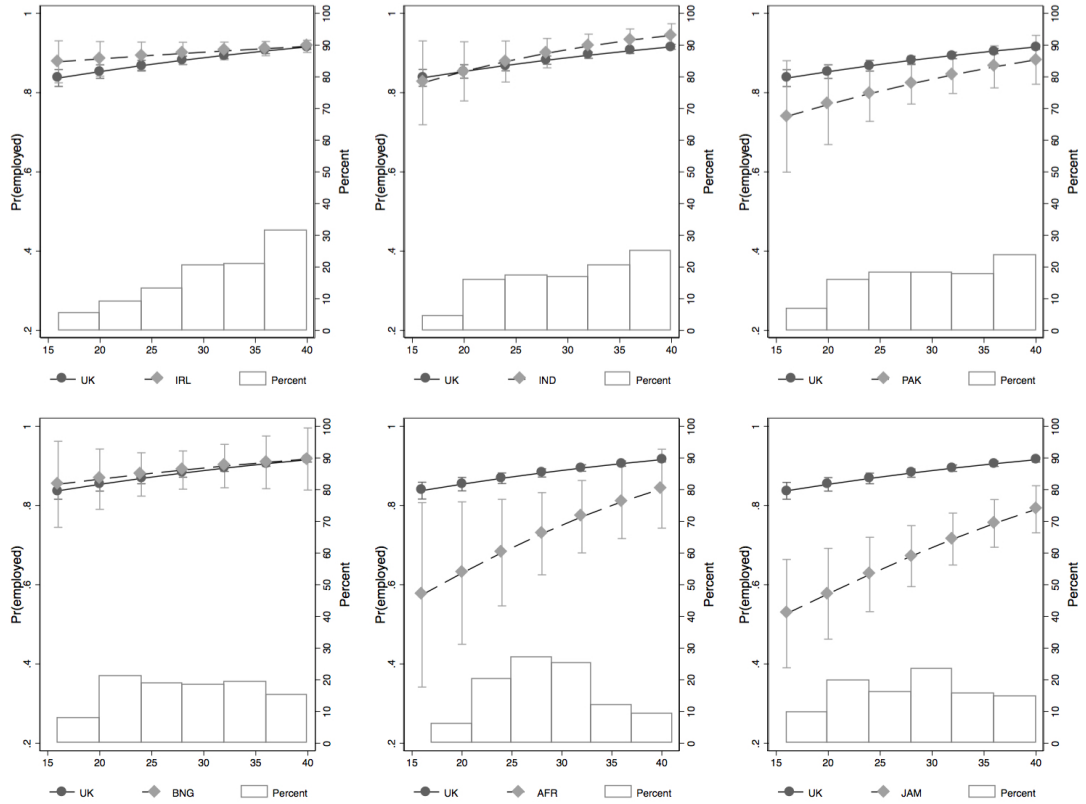



Source: *Understanding Society*, waves 1-4, author's analysis.

Age also interacts with some ethnic origin categories. As for education, average adjusted probabilities are estimated by allowing the slopes to vary across groups, while keeping the rest of the variables in the model at their means. Moreover, in each subgraph I include the age distribution of each ethnic-origin group to provide information on the number of actual cases in the data for each interaction point. Results show that men partnered to African and Jamaican women, as well as Pakistani women, benefit more from an extra year than native men and women respectively in terms of increasing their probability of being employed. For the rest of the groups the effect of age behaves in a similar way than natives.

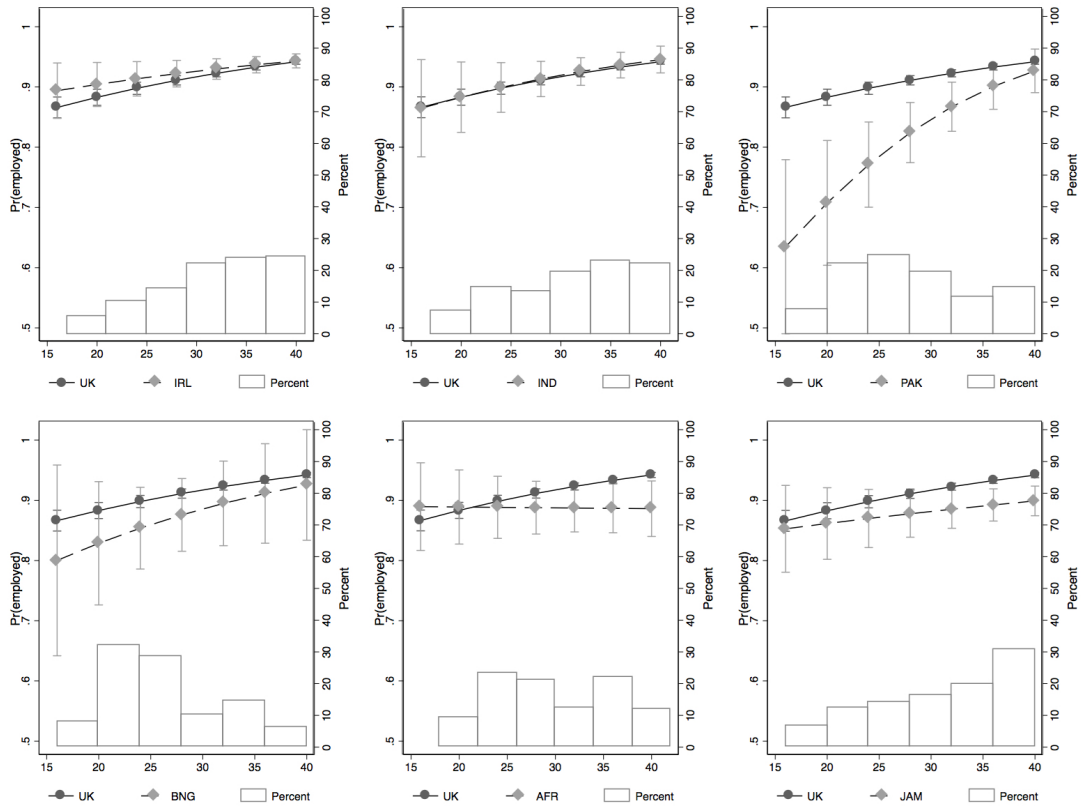
[90] Graphs report 95% confidence intervals.

*Graph 5.13 Interaction effect between age and ethnic origin on the probability of being employed. Men*




Source: *Understanding Society*, waves 1-4, author's analysis.

*Graph 5.14 Interaction effect between age and ethnic origin on the probability of being employed. Women*




Source: *Understanding Society*, waves 1-4, author's analysis.

Interaction results have clarified that the highest employment penalties are actually faced by second-generation young African and Jamaican men without degree-level education. As we have also observed, the effect of growing up in a workless household, or in a household in which the father did not work, on employment is also stronger for men with these two characteristics. On the other hand, Pakistani young and non-university educated women suffer comparatively large employment penalties, which are also aggravated by having grown up in a workless household. And, as descriptive results have shown earlier in this chapter, the latter is case of about 1 in 4 Pakistani women.

## 5.5 Results: the effect of parental social class on occupational attainment

*Ethnic origin differences in origin and destination class distributions*

For the study of occupational attainment, I use as a dependent variable a categorical measure based on the National Statistics Socio-Economic Classification (NS-SEC) with an extra category for long term unemployment[91]. The inclusion of unemployment as a category at destination allows for an extension of the previous section by conditioning now the effect on class of origin instead or work status. As shown in chapter 3, the class of origin distributions of second generation immigrants and natives converge to a great extent at destination. Significant differences remain however between groups. On one hand, second generation Pakistani and Bangladeshi men and women are underrepresented in the salariat[92]; while, on the other, Irish, Indians, and Africans have a higher percentage of cases at the top of the class distribution than natives. Pakistani men are also more likely than other groups to be found in the category 'small employers' (about 13% of the cases). Overall, there are no substantive differences across groups in semi-/routine[93] occupations, except the comparatively low presence of Indian men, and African men and women. Moreover, as already shown in this chapter, what all second-generation immigrants in the sample have in common compared to natives is their higher percentage of unemployment.

Social origin is still a key predictor of occupational attainment along and on top of edeucation. Second generation immigrants are more likely to grow up in a disadvantaged family, at least in terms of social class. As already pointed out in this chapter, they are for instance more likely than natives to come from a workless household. In particular, Pakistani and Bangladeshi men and women have the most disadvantaged backgrounds. Compared to the rest of the groups, they have the highest percentage of cases coming from workless households, and the lowest from the salariat. Men and women in these two groups (especially Pakistanis) are also more likely to come from families with small businesses. Africans and Indians have instead a higher percentage of people with a salariat background than natives, although their class of origin distributions are more polarized, especially in the case of Indians. Finally,

[91] For descriptive purposes, I use the 5-category version of the NS-SEC (+ unemployment). For multivariate analyses, I collapse it instead into three categories (+ unemployment) due to the small number of observations in some of its categories for particular ethnic origin groups.
[92] I use salariat interchangeably with 'managerial and professional' positions throughout the text.
[93] Throughout the chapter I use 'semi-/routine' as an abbreviation for 'semi-routine and routine'.

Jamaican men and women have the most disadvantaged origin distribution after Pakistanis and Bangladeshis (see *tables A5.10* and *A5.11* in the appendix)[94].

*Ethnic-origin penalties/premiums in occupational attainment*

Based on results from multinomial regression models, in *graphs 5.15* and *5.16* I report average marginal effects for ethnic origin categories on the probability of attaining either a salariat, an intermediate[95], a semi-/routine, or an unemployment position for men and women respectively. I estimate three coefficients per group, as I incorporate social origin and education gradually in the model to test for their individual contribution[96]. Ethnic stratification research tends to either focus on access to the salariat or use continuous measures of attainment (e.g. ISEI). Both ethnic origin and gender differences are likely to vary however depending on the occupational category at destination we look at.

Among men, net of social origin and education, none of the groups is more likely than natives to access the salariat —see the first sub-graph on the left. For Indian and Bangladeshi men (and Jamaican to a lesser extent), their respective initial premium and penalty reduce significantly across models, pointing to a strong mediating effect of education and social origin. For African and Pakistani men instead, sizeable net penalties in access to the salariat remain. In both cases, these become significant after controlling for education. This points to the direction that men in these two groups need a higher educational attainment than native men to reach the salariat.

Differences are not great across groups in access to intermediate positions. I only find statistically significant differences for Jamaican men, who are less likely than native to be in this class position. Men in all groups are also as likely as native to be in routine/semi-routine occupations, with the only exception of Indian, who are about 10% more likely to avoid this class position. In the case of unemployment, we observe a penalty for African and Jamaican men —as already seen in the first part of this chapter. Compositional differences in education and social origin between men in these two groups and natives do not seem to explain the

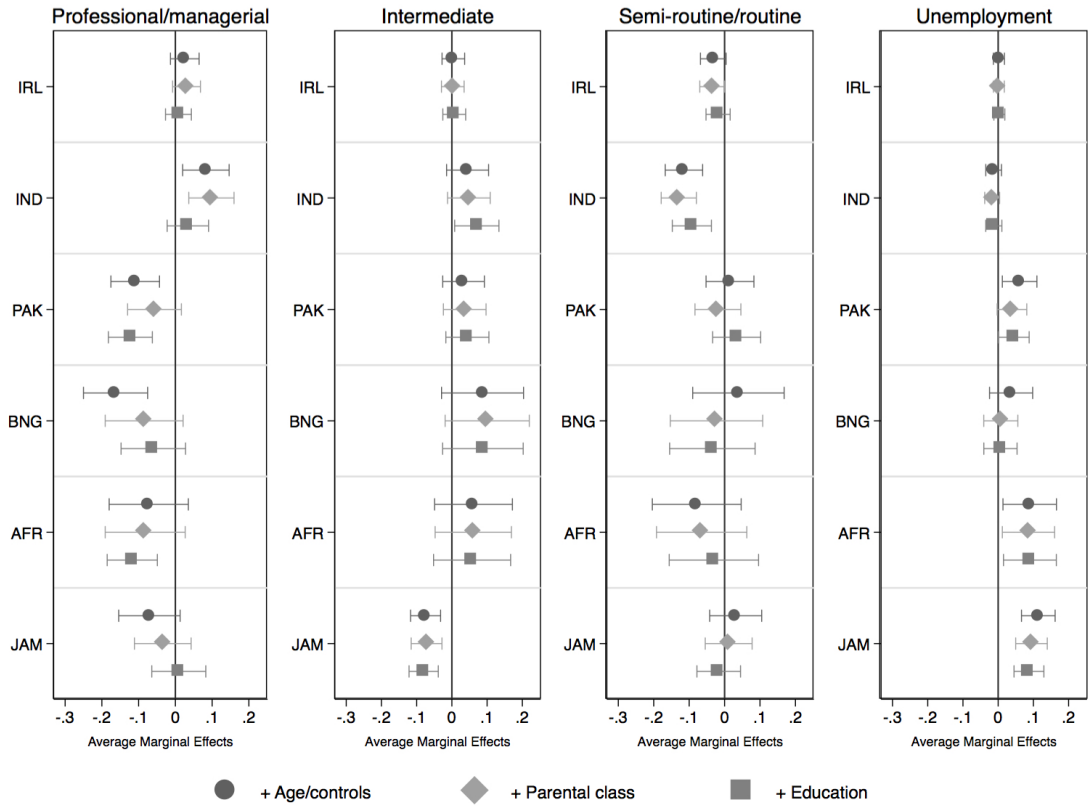
[94] Ethnic origin differences in terms of educational attainment, age, region, and health are similar to those reported in the first part of the analyses, and therefore not discussed in the body of the text. Descriptive results for these variables are provided in *tables A5.10* and *A5.11* in the appendix.

[95] As detailed in chapter 2, the category 'intermediate' includes: intermediate occupations (clerical, sales, service), small employers and own account workers, and lower supervisory and technical occupations.

[96] Models control for age, region, and health status. Results can be consulted in *tables A.12* and *A.13* in the appendix.

penalty of the former, and do little in explaining that of the latter. For men in the rest of the groups, I do not observe significant penalties with respect to native.

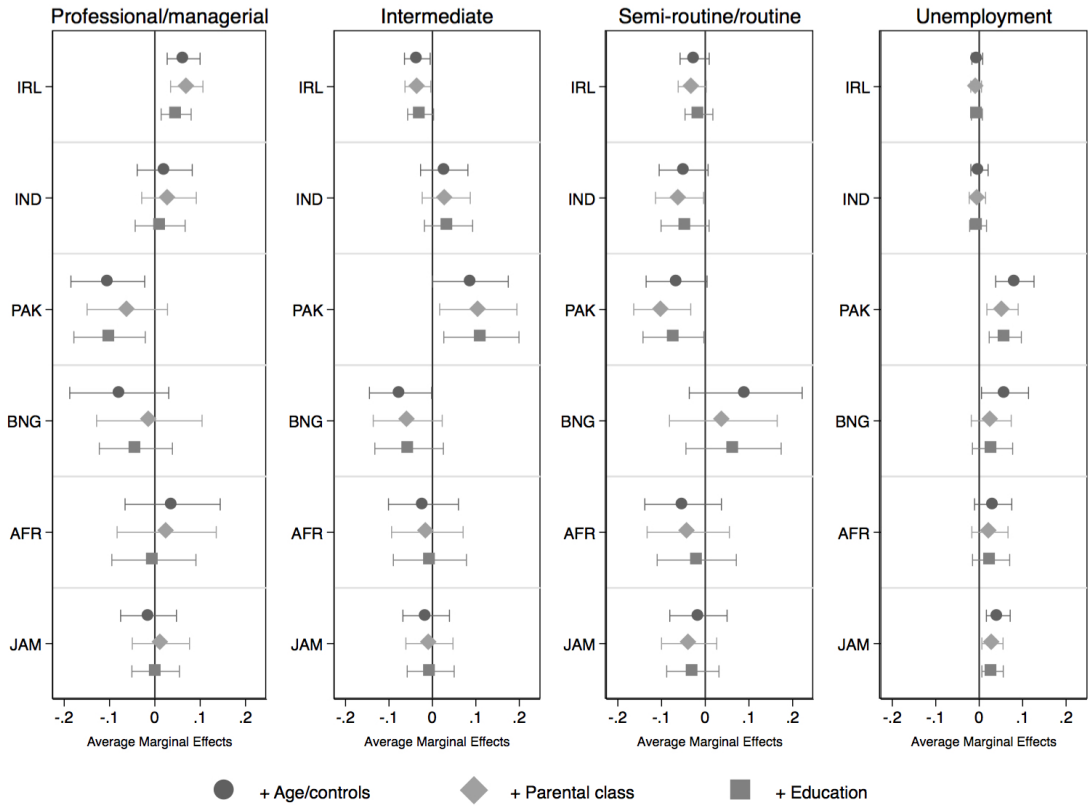
*Graph 5.15 Gross and net ethnic differences in occupational attainment (men). Average marginal effects after multinomial logistic regression*




Source: *Understanding Society*, waves 1-4, author's analysis.

For women, as in the case of men, Pakistani are less likely than native to access the salariat. Again, the penalty increases when education is added into the model. On the contrary, and unlike in the case of men, second generation Irish women have a higher probability than natives to access the salariat, although its premium reduces in size after accounting for social origin and education. Access to intermediate positions is in the case of women higher for Pakistani in comparison to native. Pakistani women seem to be more likely than native to avoid routine/semi-routine occupations, although in the last sub-graph we observe that at the same time they also have a higher probability than native women to be unemployed, as we have also seen in the first part of this chapter.

*Graph 5.16 Gross and net ethnic differences in occupational attainment (women). Average marginal effects after multinomial logistic regression*




Source: *Understanding Society*, waves 1-4, author's analysis.

To sum up, African men and Pakistani women are the most disadvantaged. On one hand, they have a lower probability than native men and women to attain managerial and professional positions and, on the other, they are more likely to be unemployed. Moreover, Pakistani men also have a lower probability than native in accessing salariat occupations at similar levels of social origin and education. Penalties for African and Pakistani men, as well as for Pakistani women, in accessing the salariat become stronger and statistically significant once we include education in the model. I move next to assess the effect of education and social origin on occupational attainment, and also whether the strength of these effects differ by ethnic origin in comparison to natives.

*The role of social origin and education*

Results[97] show existing penalties in access to the salariat for those coming from other origins than managerial and professional. Even if education strongly mediates the effect of social origin, a direct effect (DESO) remains. Among men, those with an intermediate instead of a salariat background are 7% less likely to be in a salariat position. For those coming from semi-/routine and workless households the effect is twice as large —i.e. about 14% more likely. Among women, the DESO is weaker. Women from an intermediate social origin position are 4% less likely to access managerial and professional occupations, and women coming from semi-/routine and workless households 8 and 10% less likely respectively. Education stands as a key factor for attaining a salariat position. Both men and women with a degree are approximately 40% more likely to be in a managerial or professional position than those without.

At the other end of the occupational structure, people from all social backgrounds are, compared to those from the salariat, more likely to attain a semi-/routine occupation. Men with semi-/routine origins are 14% more likely than men with a salariat background to end up in a semi-/routine occupation. Among women, the effect is weaker, and those with a semi-/routine background are, net of education, 10% more likely to be in a semi-/routine occupation than those with a salariat origin. For both men and women, having grown up in a workless rather than a salariat household is also significantly associated with a higher probability of ending up in a semi-/routine occupation. Regarding the effect of education, having a degree reduces the probability of being in a semi-/routine position by about 30 p.p. for both men and women.

In terms of the intergenerational transmission of worklessness and the probability of being unemployed depending on one's social origin, men who grew up in a workless household are 7% more likely to be unemployed than those who grew up in a salariat one. Moreover, men with a semi-/routine background are about 3% more likely. For women the DESO is almost the same that in the case of men for the different categories of social origin. Regarding education, having a degree protects on top of social origin against unemployed, although its effect is less determinant than for the other class positions. Next, I test whether these effects behave similarly for all groups.

[97] See *tables A5.14* and *A5.15* in the appendix.

*Ethnic origin differences in the role of social origin and education*

Results (and associated statistical tests) have so far confirmed the existence of different ethnic origin intercepts in occupational attainment. Moreover, for the majority of the population, I have found a DESO and a sizeable effect of education on the probability of either attaining an upper social class position or avoiding a low one. In what follows, I test whether the effects of social origin and education differ by ethnic origin, or otherwise behave similarly across groups. For this aim, I interact the parental occupational position and respondents' educational attainment with ethnic origin. For most groups the effects of these two predictors work in a similar way than for natives, although for some other significant differences are observed for different levels of occupational attainment (see *tables A.16-A.17* in the appendix for more specific details). The models in which the graphs below are based, allow for the effects (i.e. slopes) of social origin and education to vary by ethnic origin[98]. Graphs for the interaction effects show ethnic gaps in the probability of attaining a particular class position conditional on class of origin.

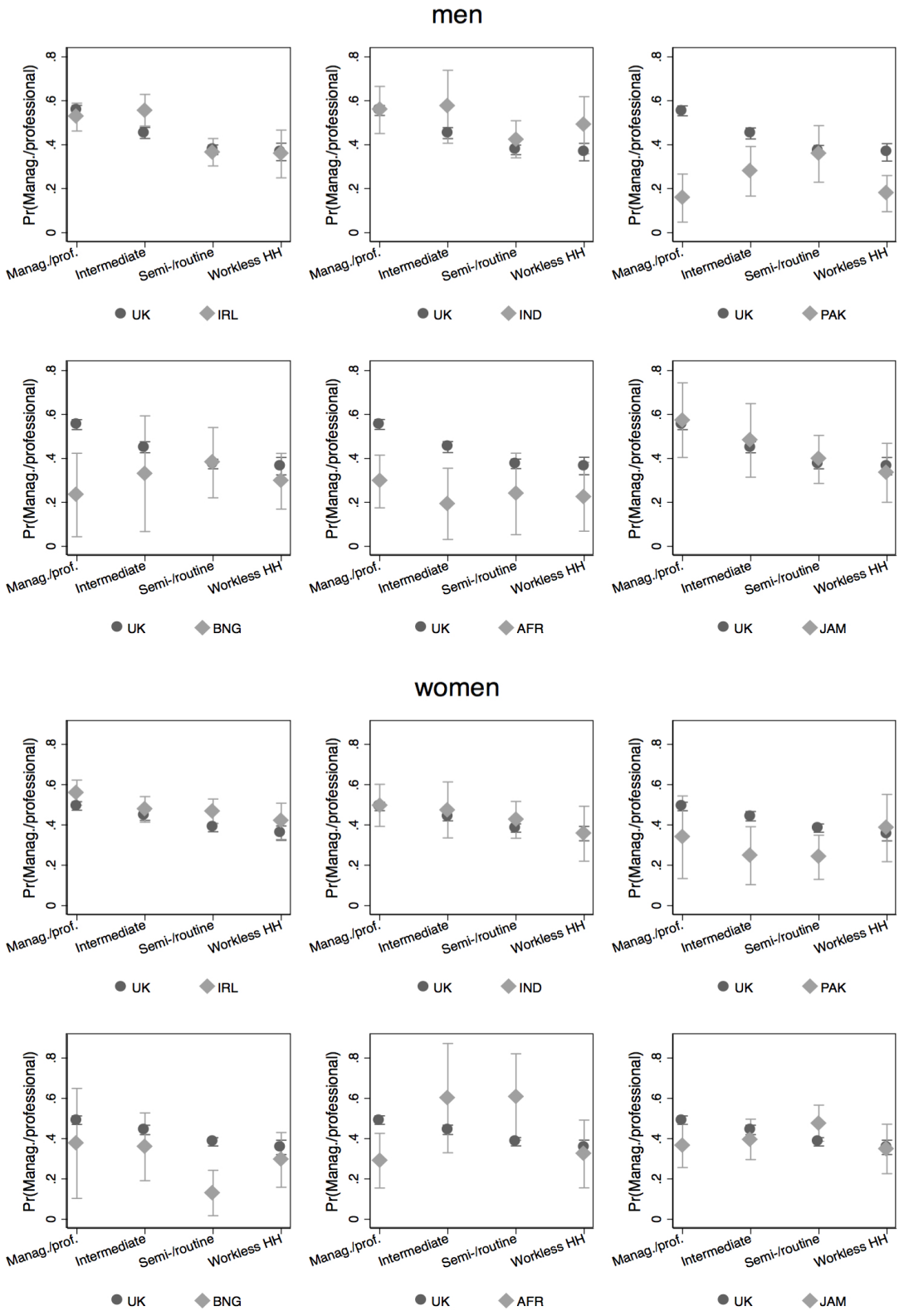
I find the highest social origin differences between groups in access to the salariat. Among men, at the top end of the class origin distribution, Pakistani, Bangladeshi, and African seem to have a higher difficulty than native in reproducing their advantageous position. In the case of Pakistani men for instance, as shown in the third sub-graph in *graph 5.17,* those with a salariat background are three times less likely to retain their salariat position than their native counterparts. Moreover, Pakistani men coming from intermediate or workless origins are also less likely to attain a position in the salariat than native men with similar backgrounds. On the other hand, for other groups like Jamaican men, the probability of being in the salariat is close to that of native across social origin categories. The social origin effect works therefore similarly across these two groups.

For women, I also find ethnic origin differences in the effect of social origin on access to the salariat. African women from a high social origin position, as in the case of their male counterparts, have a lower probability than native with the same background to attain a salariat position. This is also the case, although to a lesser extent for Jamaican. For Bangladeshi and

[98] We should be cautious with the interpretation of interaction effects, as some estimates have wide confidence intervals — especially for Bangladeshis.

Pakistani women, negative differences in the probability of attaining a salariat position are instead greater among those with an intermediate/low social background.

*Graph 5.17 Interaction effects between ethnic and social origins on the probability of attaining a salariat position. Average adjusted probabilities after logistic regression*




Source: *Understanding Society*, waves 1-4, author's analysis.

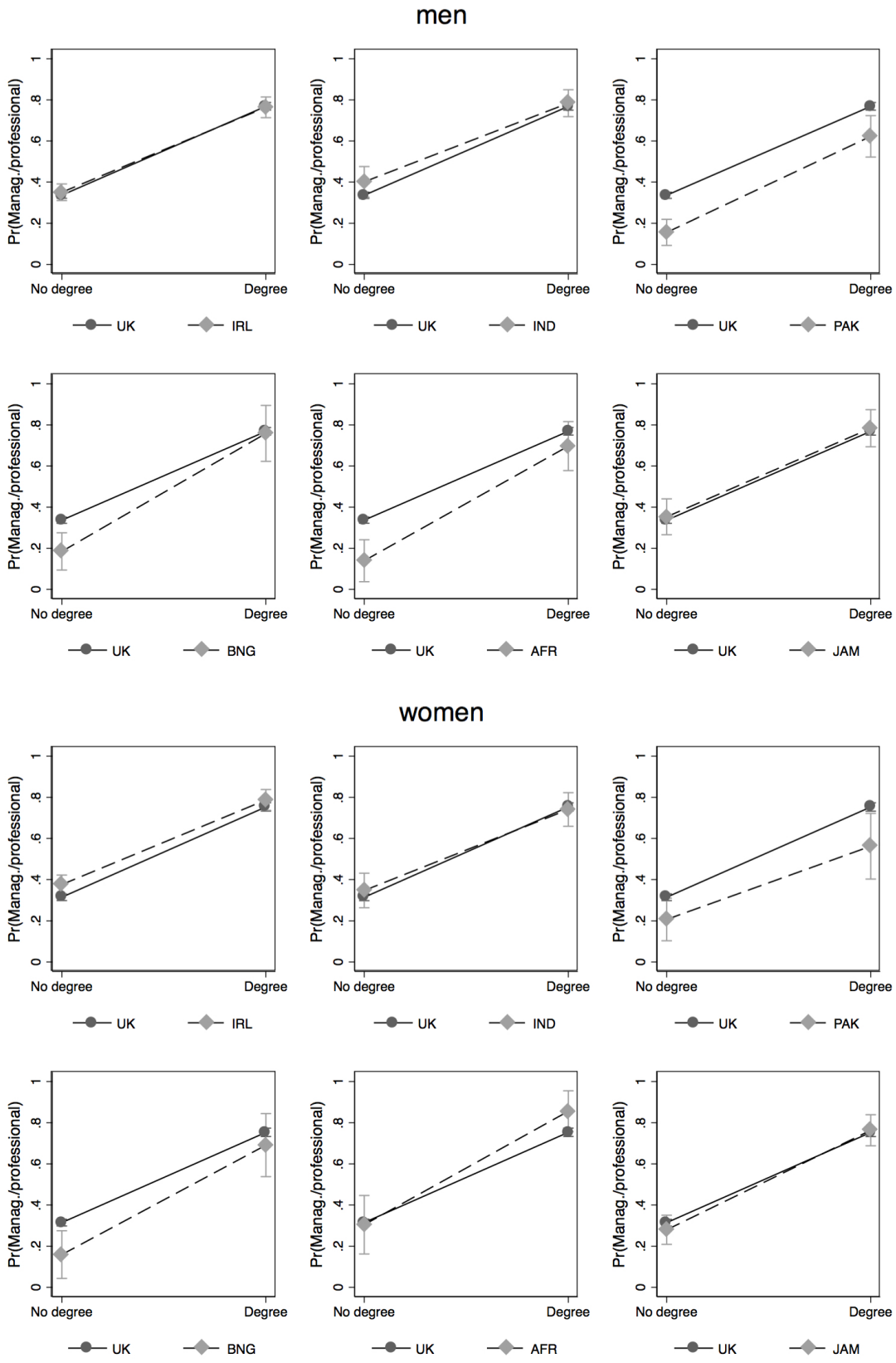
Having a university degree increases the probability of attaining a salariat position substantially, and for some ethnic-origin groups the effect is even stronger than for natives. *Graph 5.18* shows that among African and Bangladeshi men and women, a degree pays off more than it does for natives in terms of accessing the salariat. On the contrary, for Pakistani women returns to a degree are lower than for native, as differences in the probability of being in the salariat widen among graduates. For Pakistani men, obtaining a degree does not compensate for their penalty with respect to native in access to the salariat, and for the rest of the groups the effect of education behaves similarly than for natives.

Indian and African men are more likely than native to attain an intermediate position across social origin categories —except parental worklessness—. The negative effect of education on the probability of ending up in an intermediate position is weaker for Indian men than native, as among non-graduates the former are less likely to be in an intermediate position. Pakistani women with intermediate and semi-/routine backgrounds are also more likely than native women with the same backgrounds to be found in intermediate positions. Like Indian men, Pakistani women are also less likely to be found in intermediate positions than native among non-graduates.

Regarding access to semi-/routine occupations, Indian men with intermediate and semi-routine origins are more likely than native men to avoid them. Moreover, compared to native men, Indian without a degree are less likely to be in a semi-/routine position than native. Among graduates instead, the probability is equally low for both groups. For Pakistani men, the probability of ending up in a semi-/routine occupation compared to native is higher among those from higher social origins. In the case of women, Pakistani and Jamaican with semi-/routine origins are less likely than native to reproduce this class position; and African women coming from a workless household are also less likely to do so than native women with the same social origin. In terms of education, among women without a degree, native are significantly more likely than Pakistani to be in a semi-/routine position[99].

[99] For results on the interaction effect of social and ethnic origins, as well as social origin and degree, on the probability of attaining an intermediate position or a semi-/routine position see *tables A.16* and *A.17*, and *graphs A.1-A.4* in the appendix.

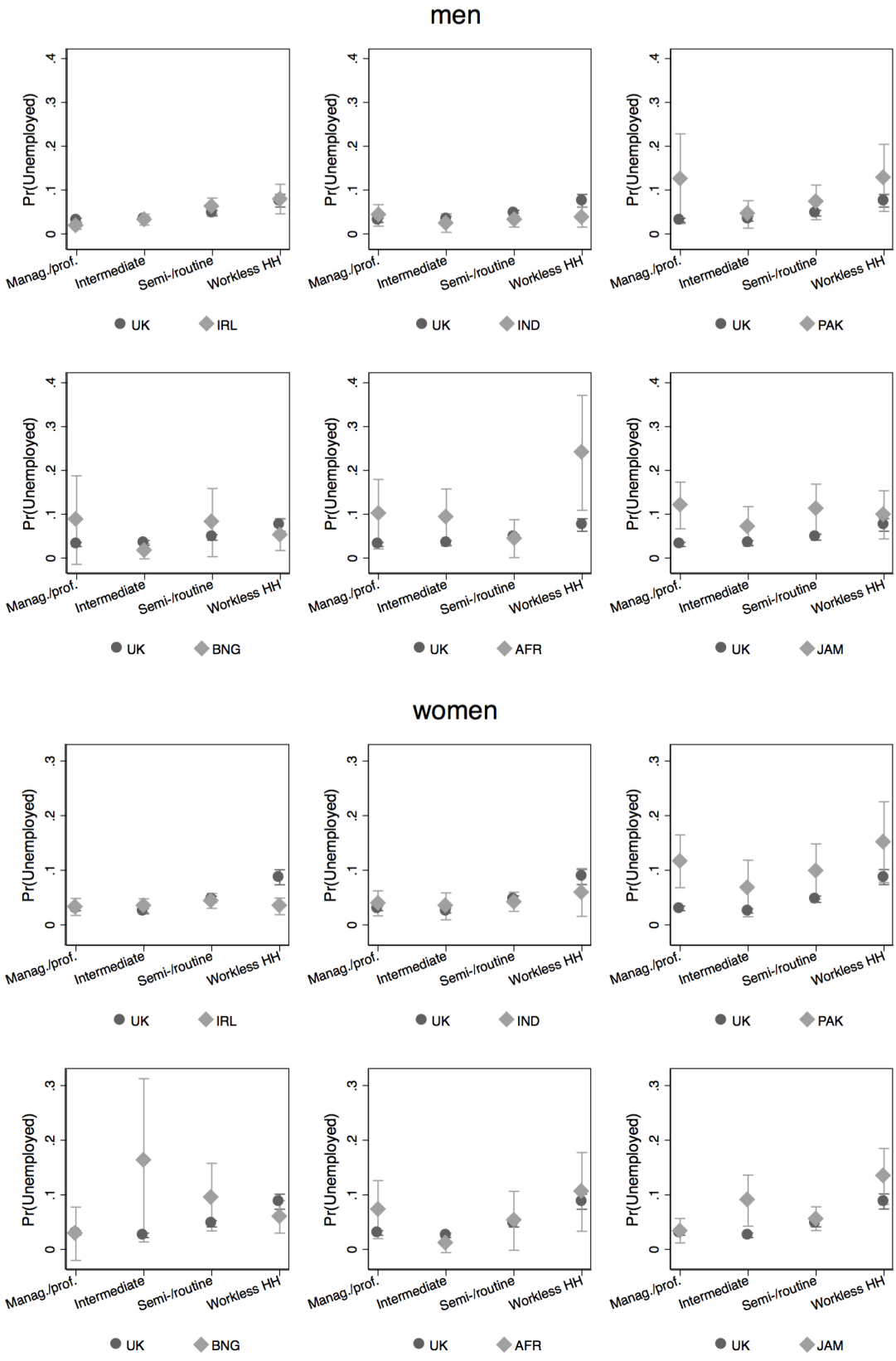
*Graph 5.18 Interaction effects between ethnic origin and degree on the probability of attaining a salariat position. Average adjusted probabilities after logistic regression*




Source: *Understanding Society*, waves 1-4, author's analysis.

Pakistani women are however more likely than natives to be unemployed across social origin categories, the highest differences being for those with salariat origins (see *graph 5.19*). Moreover, as we have already seen in the first part of this chapter, among women without a degree, Pakistani are also more likely than native to be unemployed. For men, African from a workless household are more likely than native with the same origin to experience unemployment, with differences with natives being also higher among those with high social origins. The latter is also true for Jamaican men. Thus, Jamaican men coming from the salariat are more likely to be unemployed than native men with a similar social origin. Moreover, the protective effect of education against unemployment is stronger for African and Jamaican men. Among non-graduates, Jamaican men are about 10 percentage points more likely to be unemployed than native, and African men 5 percentage points more likely; and, among graduates, differences are instead negligible.

*Graph 5.19 Interaction effects between ethnic and social origins on the probability of being unemployed. Average adjusted probabilities after logistic regression*




Source: *Understanding Society*, waves 1-4, author's analysis.

## 5.6 Summary and discussion

*Employment*

In the first part of the chapter I have studied the role of parental work status, education, and age in explaining employment inequalities. I have also tested the extent to which these factors can account for observed ethnic employment penalties, and finally whether their effect on employment differs by ethnic origin.

At the descriptive level, I have first identified that second generation immigrants are less likely to be employed than natives, although employment penalties differ substantively by ethnic origin. I have also found that Pakistani and Bangladeshi men and women are more likely to have grown up either in a workless or single-earning household in which the mother did not work. On the other hand, African and Jamaican men and women have the highest percentage of persons coming from a single-earning household in which the father did not work. In terms of education, second generation immigrants are on average, except Bangladeshi and Jamaican men, higher educated than natives. Moreover, with the only exception of Irish, they are also younger.

I have found a significant effect of parental work status on employment. This effect is particularly strong for cases in which none of the parents worked whilst the respondent was growing up (i.e. workless household); and, among men, also for cases in which the father did not work. The effect of parental work status is only mediated by education to a little extent, although the latter clearly moderates this association. Thus, the effect of coming from a workless household is about three times stronger if the respondent does not have a university degree than if she/he does.

I have also found that compositional differences in parental work status and age explain a great share of the employment penalty experienced by the second generation in the British labour market. Education does not seem instead to play a role for most of the groups. When education is included, penalties actually increase for the second generation, pointing to a penalty associated with higher education, especially at an early age, as when this is included employment penalties decrease significantly. Penalties are left unexplained for Jamaican, African, and Pakistani men; as well as Pakistani, Bangladeshi, African, and Jamaican women. Interaction models have revealed that, in particularly for African and Jamaican men the effects of education and age are stronger than for native. Thus, for men in these two groups employment penalties with respect to native men are mostly found at lower educational levels

and younger ages. I have also found employment penalties to be higher for younger and lower educated Pakistani women.

*Occupational attainment*

In the second part of the chapter I have first reported compositional differences in the origin and destination class distributions by ethnic origin, and noted that different groups in the sample grew up in markedly different class contexts. Differences for the most disadvantaged groups at origin, namely Pakistani and Bangladeshi, reduce however with respect to natives at destination, although some remain. For the most advantaged groups, I have observed different patterns at the descriptive level, differing also by gender. Thus, while Indian men upgrade significantly their origin occupational distribution at destination, Indian women upgrade it to a much lesser extent. On the other hand, in the case of Africans, their initial class advantage with respect to natives diminishes. In the case of Irish, both men and women improve significantly. Moreover, Jamaican second generation men have a higher percentage of unemployment than their parents, with this being the highest across groups. Jamaican women improve instead their position in the second generation.

Results have confirmed the existence of gross and net ethnic-origin penalties/premiums in occupational attainment for some groups. The sizes of these penalties vary depending on the category of occupational attainment. Among men, I have found the highest penalties in access to the salariat (African and Pakistani), and in the probability of being unemployed (Jamaican and African). Among women, I have also found the highest penalties in these two categories, in this case for Pakistani.

Regarding the interaction effect between social and ethnic origins, I have found three main diverging patterns for particular groups: (1) a weaker social origin effect (or lower class inheritance) with respect to natives at the upper part of the occupational distribution (Pakistani and Bangladeshi men, and African men and women); (2) a lower protective effect of upper social origins against unemployment (Pakistani men and women, and African and Jamaican men); and (3) a stronger intergenerational transmission of worklessness (African men and Pakistani women).

In terms of differences in the effect of educational attainment, I have observed a compensatory effect of having a degree in the probability of accessing the salariat for Bangladeshi and African second generation men and women —but not for Pakistani. Moreover, I have also found a compensatory effect of having a degree in avoiding unemployment for

Jamaican men and Pakistani second generation women, and to a lesser extent also for Bangladeshi men and women, and African men.

I discuss these results on occupational attainment in the light of those of Zuccotti (2014) and Platt (2007), two central articles on the intersection between ethnic and social origins and education and its effect on occupational attainment in the UK. Using also Understanding Society data, Zuccotti finds both compositional and interaction ethnic origin effects on occupational attainment, which she measures by means of ISEI scores —i.e. for a sample of employees and self-employed. The author concludes that coming from a low social origin has a certain advantage for the second generation, except in the case of Bangladeshi women (with an unchanging penalty in accessing the service class after controlling for social origin), and Africans (who experience a penalty associated with higher social origins).

Regarding differences in class reproduction patterns (or interaction effects), Zuccotti concludes that second generation women closely resemble natives' social reproduction patterns —i.e. a higher social origin results in a higher occupational status. Bangladeshi women are an exception, as they depend more strongly on their social background than native women do. More precisely, the author reports a premium in occupational attainment with respect to native women among those without a degree. Zuccotti argues that this might be driven by the compensatory effect of having entrepreneurial parents. On the contrary, Zuccotti finds that second generation Pakistani, Caribbean, and African men show a lower dependence on social background compared to native men. Men in these three groups have a penalty associated with high social origins, as the latter do not provide any advantage. As in the case of Bangladeshi women, the author finds differences to be conditional on education. In this case however, the penalty applies mostly to those with a university degree. The author proposes the lack of 'signalling' resources, discrimination, and community constraints (especially in the case of Pakistani men) as plausible explanations.

On the other hand, in her study on the role of education on intergenerational class mobility using data from the ONS Longitudinal Study, Platt (2007) concludes that while social origin remains an important determinant of success for natives in the UK, the second generation presents instead a more meritocratic profile making use of education to achieve upward mobility. According to the author, what is common to all ethnic origin groups is that those without educational qualifications suffer a greater penalty in relation to higher class outcomes than natives. According to Platt's findings, the use of education to achieve higher occupational positions varies however by ethnic origin. On one hand, Indians make an effective use of

qualifications to move in the social structure obtaining particularly high returns to higher levels of qualifications. Moreover, this seems to be reinforced by a positive role of ethnic capital. In the case of Pakistanis, the differentiation in mobility chances at lower and higher levels of qualifications is also greater than for natives. However, unlike Indians, educational qualifications do not compensate for their penalty in occupational attainment, which remains across all educational levels. For Pakistanis, social origin does not influence outcomes once education is taken into account, and group resources (or ethnic capital) do not seem either to be relevant for upward mobility. Finally, the author argues that Caribbeans have similar returns to education than natives, although social origin does not bring any advantage neither before nor after education is accounted for. On top of that, the role of 'ethnic capital' is also negligible due to group-specific characteristics such as geographical dispersion and social integration. Moreover, education exerts a significantly lower protection against unemployment for this group. For these reasons, Caribbeans have difficulties in maintaining advantage across generations.

In this chapter I have contributed to Zuccotti's research by using categorical dependent and independent variables including 'non-employment' as a class category at origin, and 'unemployment' at destination. Moreover, I have also contributed to the study of Platt by using different data, differentiating between gendered trajectories for men and women, and including more ethnic origin groups in the analyses. In line with the findings of Zuccotti, as well as those on chapter 3 of this thesis, I conclude that differences in social reproduction patterns between the second generation and natives are greater among men than women, for whom there are important ethnic origin differences in the selection into labour force participation. Differences in social reproduction are more evident at the top end of the class distribution once education is accounted for. Particularly, as Zuccotti also finds, the penalty associated with high social origins is stronger for Pakistani, African, and Bangladeshi men.

On the other hand, as Platt concludes, I also find that the effect of having a degree is overall, and compared to natives, either equal or stronger for the second generation once we account for social origin. I observe that having a degree does not compensate for the penalty in access to the salariat of Pakistani men and women compared to their respective native counterparts. African and Bangladeshi men and women are the ones who benefit the most (in comparison to natives) from having a degree. Also in line with Platt's findings, results have shown that Jamaican men and women have similar returns to education than natives in access to the salariat, and a higher probability of unemployment (net of education) among men and women coming from a high/intermediate social origin.

## 5.7 Appendix unemployment

*Table A5.1 Summary statistics (men)*

| | | UK | IRL | IND | PAK | BNG | AFR | JAM |
|---|---|---|---|---|---|---|---|---|
| Variables: | Range | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P |
| Employed | 0/1 | 90.54 | 90.09 | 90.38 | 78.22 | 76.11 | 78.03 | 69.43 |
| Parental work status: | 1/4 | | | | | | | |
| Dual-earning hhld. (ref.) | | 60.83 | 59.16 | 51.62 | 10.46 | 4.68 | 61.64 | 58.7 |
| NW mother | | 28.33 | 27.39 | 29.05 | 56.45 | 48.52 | 16.07 | 16.71 |
| NW father | | 6.13 | 8.17 | 7.95 | 1.72 | 0.25 | 11.15 | 10.87 |
| Workless hhld. | | 4.71 | 5.28 | 11.38 | 31.38 | 46.55 | 11.15 | 13.72 |
| Education: | 1/4 | | | | | | | |
| No qualification (ref.) | | 7.21 | 5.57 | 3.34 | 5.30 | 10.10 | 0.33 | 5.98 |
| GCSE & other | | 31.44 | 28.24 | 20.51 | 31.38 | 36.21 | 18.36 | 38.32 |
| A-level & other | | 35.67 | 34.82 | 31.50 | 30.95 | 31.03 | 30.16 | 38.72 |
| Degree | | 25.68 | 31.37 | 44.65 | 32.38 | 22.66 | 51.15 | 16.98 |
| Age | 16-64 | 42.75 | 42.68 | 35.92 | 32.40 | 29.81 | 33.59 | 38.28 |
| | | (12.13) | (11.31) | (10.39) | (9.04) | (7.98) | (9.75) | (11.21) |
| London | 0/1 | 5.53 | 11.78 | 36.31 | 13.61 | 67.73 | 62.30 | 57.07 |
| Health | 1-5 | 2.37 | 2.46 | 2.40 | 2.37 | 2.40 | 2.20 | 2.46 |
| | | (0.99) | (1.04) | (0.96) | (1.02) | (1.03) | (0.97) | (1.03) |
| *N* | | 23,259 | 2,461 | 1,019 | 698 | 406 | 305 | 736 |

M (mean), SD (standard deviation), P(percentage).

Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.2 Summary statistics (women)*

| | | UK | IRL | IND | PAK | BNG | AFR | JAM |
|---|---|---|---|---|---|---|---|---|
| Variables: | Range | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P |
| Employed | 0/1 | 92.88 | 92.59 | 89.95 | 72.52 | 72.96 | 84.66 | 82.23 |
| Parental work status: | 1/4 | | | | | | | |
| Dual-earning hhld. (ref.) | | 62.59 | 58.86 | 57.68 | 15.78 | 7.04 | 59.09 | 63.28 |
| NW mother | | 26.16 | 25.09 | 26.67 | 54.96 | 41.13 | 20.17 | 13.71 |
| NW father | | 6.25 | 9.62 | 7.54 | 3.72 | 3.38 | 9.38 | 11.76 |
| Workless hhld. | | 5 | 6.44 | 8.12 | 25.53 | 48.45 | 11.36 | 11.25 |
| Education: | 1/4 | | | | | | | |
| No qualification (ref.) | | 6.32 | 5.42 | 2.61 | 2.13 | 2.54 | 0.85 | 2.71 |
| GCSE & other | | 31.87 | 28.34 | 20.68 | 26.60 | 25.35 | 15.62 | 30.71 |
| A-level & other | | 35.29 | 33.91 | 39.52 | 40.78 | 36.06 | 34.38 | 35.62 |
| Degree | | 26.52 | 32.32 | 37.20 | 30.50 | 36.06 | 49.15 | 30.96 |
| Age | 16-64 | 42.17 | 43.17 | 36.02 | 30.79 | 26.90 | 35.77 | 40.23 |
| | | (11.67) | (11.11) | (10.11) | (8.72) | (6.93) | (10.30) | (10.13) |
| London | 0/1 | 4.64 | 11.21 | 29.95 | 18.26 | 65.07 | 66.19 | 57.61 |
| Health | 1-5 | 2.34 | 2.39 | 2.42 | 2.50 | 2.41 | 2.17 | 2.64 |
| | | (0.99) | (1.01) | (1.02) | (1.04) | (0.98) | (0.95) | (1.00) |
| *N* | | 26,234 | 2,766 | 1,035 | 564 | 355 | 352 | 1,182 |

M (mean), SD (standard deviation), P(percentage).
Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.3 Effect of parental work status on the probability of being employed. Linear probability models*

| | Men | | Women | |
|---|---|---|---|---|
| | M0 | M1 | M0 | M1 |
| Parental work status (ref. dual-earning hhld): | | | | |
| Non-working mother | -0.042*** | -0.035*** | -0.034*** | -0.029*** |
| | (-0.055 - -0.030) | (-0.048 - -0.023) | (-0.044 - -0.024) | (-0.039 - -0.019) |
| Non-working father | -0.073*** | -0.064*** | -0.039*** | -0.032*** |
| | (-0.102 - -0.044) | (-0.092 - -0.036) | (-0.058 - -0.019) | (-0.051 - -0.012) |
| Workless hhld | -0.124*** | -0.108*** | -0.151*** | -0.127*** |
| | (-0.157 - -0.090) | (-0.139 - -0.076) | (-0.180 - -0.122) | (-0.155 - -0.100) |
| Educational attainment (ref. no qualif.): | | | | |
| GCSE & other | | 0.145*** | | 0.137*** |
| | | (0.111 - 0.179) | | (0.107 - 0.168) |
| A-level & other | | 0.205*** | | 0.189*** |
| | | (0.172 - 0.238) | | (0.159 - 0.219) |
| Degree | | 0.212*** | | 0.201*** |
| | | (0.179 - 0.246) | | (0.170 - 0.231) |
| Age | 0.020*** | 0.018*** | 0.012*** | 0.010*** |
| | (0.017 - 0.023) | (0.015 - 0.021) | (0.009 - 0.014) | (0.007 - 0.012) |
| Age squared | -0.000*** | -0.000*** | -0.000*** | -0.000*** |
| | (-0.000 - -0.000) | (-0.000 - -0.000) | (-0.000 - -0.000) | (-0.000 - -0.000) |
| Constant | 0.579*** | 0.403*** | 0.714*** | 0.539*** |
| | (0.507 - 0.651) | (0.327 - 0.479) | (0.656 - 0.772) | (0.477 - 0.602) |
| N | 26,842 | 26,842 | 30,949 | 30,949 |

*** p<0.01, ** p<0.05, * p<0.1. Robust ci in parentheses.
Notes: Models control for region and health status.
Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.4 Effect of parental work status on the probability of being employed by educational attainment and gender. Linear probability models*

| | Men | | Women | |
|---|---|---|---|---|
| | No degree | Degree | No degree | Degree |
| Parental work status (ref. dual-earning hhld): | | | | |
| Non-working mother | -0.054*** | -0.002 | -0.045*** | -0.010** |
| | (-0.064 - -0.044) | (-0.013 - 0.009) | (-0.054 - -0.037) | (-0.019 - -0.001) |
| Non-working father | -0.079*** | -0.013 | -0.041*** | -0.014 |
| | (-0.097 - -0.062) | (-0.035 - 0.009) | (-0.056 - -0.027) | (-0.032 - 0.003) |
| Workless hhld | -0.137*** | -0.039*** | -0.155*** | -0.065*** |
| | (-0.154 - -0.119) | (-0.061 - -0.017) | (-0.170 - -0.141) | (-0.086 - -0.044) |
| Age | 0.022*** | 0.015*** | 0.013*** | 0.008*** |
| | (0.020 - 0.024) | (0.012 - 0.019) | (0.011 - 0.015) | (0.005 - 0.010) |
| Age squared | -0.000*** | -0.000*** | -0.000*** | -0.000*** |
| | (-0.000 - -0.000) | (-0.000 - -0.000) | (-0.000 - -0.000) | (-0.000 - -0.000) |
| Constant | 0.475*** | 0.636*** | 0.616*** | 0.803*** |
| | (0.428 - 0.522) | (0.570 - 0.703) | (0.573 - 0.658) | (0.746 - 0.860) |
| N | 21,084 | 7,800 | 23,414 | 9,074 |

*** p<0.01, ** p<0.05, * p<0.1. Robust ci in parentheses.
Notes: Models control for region and health status.
Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.5 Effect of parental work status on the probability of being employed over age by educational attainment and gender. Linear probability models*

| | Men | | Women | |
|---|---|---|---|---|
| | No degree | Degree | No degree | Degree |
| Parental work status (ref. dual-earning hhld): | | | | |
| Non-working mother | -0.107*** | 0.013 | -0.190*** | -0.069*** |
| | (-0.143 - -0.070) | (-0.030 - 0.056) | (-0.222 - -0.157) | (-0.106 - -0.032) |
| Non-working father | -0.176*** | 0.012 | -0.270*** | -0.053 |
| | (-0.234 - -0.118) | (-0.076 - 0.101) | (-0.320 - -0.220) | (-0.122 - 0.016) |
| Workless hhld | -0.335*** | -0.159*** | -0.458*** | -0.124*** |
| | (-0.390 - -0.279) | (-0.249 - -0.069) | (-0.504 - -0.412) | (-0.195 - -0.053) |
| Age | 0.003*** | 0.001*** | 0.002*** | 0.000 |
| | (0.002 - 0.003) | (0.001 - 0.002) | (0.001 - 0.002) | (-0.000 - 0.001) |
| Interaction terms: | | | | |
| 1b.p_worked#co.dvage | 0.000 | 0.000 | 0.000 | 0.000 |
| | (0.000 - 0.000) | (0.000 - 0.000) | (0.000 - 0.000) | (0.000 - 0.000) |
| 2.p_worked#c.dvage | 0.001*** | -0.000 | 0.003*** | 0.001*** |
| | (0.000 - 0.002) | (-0.001 - 0.001) | (0.003 - 0.004) | (0.001 - 0.002) |
| 3.p_worked#c.dvage | 0.002*** | -0.001 | 0.006*** | 0.001 |
| | (0.001 - 0.004) | (-0.003 - 0.001) | (0.004 - 0.007) | (-0.001 - 0.003) |
| 4.p_worked#c.dvage | 0.005*** | 0.003*** | 0.008*** | 0.001 |
| | (0.004 - 0.007) | (0.001 - 0.005) | (0.007 - 0.009) | (-0.000 - 0.003) |
| Constant | 0.858*** | 0.917*** | 0.879*** | 0.955*** |
| | (0.832 - 0.884) | (0.890 - 0.944) | (0.855 - 0.902) | (0.932 - 0.978) |
| N | 21,084 | 7,800 | 23,414 | 9,074 |

*** p<0.01, ** p<0.05, * p<0.1. Robust ci in parentheses.
Notes: Models control for region and health status.
Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.6 Gross and net ethnic origin employment penalties(men). Linear probability models*

| | M0 | M1 | M2 | M3 |
|---|---|---|---|---|
| Country of origin (ref. UK): | | | | |
| IRL | -0.001 | -0.000 | 0.001 | -0.005 |
| | (-0.021 - 0.019) | (-0.019 - 0.019) | (-0.018 - 0.019) | (-0.023 - 0.013) |
| IND | 0.009 | 0.026* | 0.033** | 0.020 |
| | (-0.021 - 0.038) | (-0.004 - 0.056) | (0.003 - 0.064) | (-0.010 - 0.050) |
| PAK | -0.127*** | -0.101*** | -0.063** | -0.070** |
| | (-0.187 - -0.067) | (-0.158 - -0.043) | (-0.120 - -0.005) | (-0.128 - -0.013) |
| BNG | -0.088** | -0.058 | -0.008 | 0.002 |
| | (-0.161 - -0.015) | (-0.131 - 0.016) | (-0.085 - 0.068) | (-0.064 - 0.068) |
| AFR | -0.112*** | -0.101** | -0.096** | -0.112*** |
| | (-0.191 - -0.033) | (-0.181 - -0.022) | (-0.175 - -0.017) | (-0.189 - -0.035) |
| JAM | -0.199*** | -0.190*** | -0.178*** | -0.176*** |
| | (-0.260 - -0.139) | (-0.250 - -0.129) | (-0.239 - -0.118) | (-0.236 - -0.117) |
| Age | | 0.021*** | 0.020*** | 0.018*** |
| | | (0.017 - 0.024) | (0.017 - 0.023) | (0.015 - 0.021) |
| Age squared | | -0.000*** | -0.000*** | -0.000*** |
| | | (-0.000 - -0.000) | (-0.000 - -0.000) | (-0.000 - -0.000) |
| Parental work status (ref. dual-earning hhld): | | | | |
| Non-working mother | | | -0.042*** | -0.035*** |
| | | | (-0.055 - -0.029) | (-0.048 - -0.022) |
| Non-working father | | | -0.072*** | -0.062*** |
| | | | (-0.101 - -0.043) | (-0.090 - -0.034) |
| Workless hhld | | | -0.118*** | -0.101*** |
| | | | (-0.151 - -0.084) | (-0.133 - -0.069) |
| Educational attainment (ref. no qualif.): | | | | |
| GCSE & other | | | | 0.146*** |
| | | | | (0.112 - 0.180) |
| A-level & other | | | | 0.206*** |
| | | | | (0.173 - 0.240) |
| Degree | | | | 0.212*** |
| | | | | (0.179 - 0.246) |
| Constant | 0.902*** | 0.563*** | 0.590*** | 0.415*** |
| | (0.896 - 0.908) | (0.489 - 0.637) | (0.517 - 0.663) | (0.338 - 0.492) |
| N | 26,842 | 26,842 | 26,842 | 26,842 |

*** p<0.01, ** p<0.05, * p<0.1. Robust ci in parentheses.

Notes: Models control for region and health status.
Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.7 Gross and net ethnic origin employment penalties (women). Linear probability models*

| | M0 | M1 | M2 | M3 |
|---|---|---|---|---|
| Country of origin (ref. UK): | | | | |
| IRL | 0.000 | 0.001 | 0.004 | -0.000 |
| | (-0.014 - 0.015) | (-0.013 - 0.015) | (-0.010 - 0.018) | (-0.015 - 0.014) |
| IND | -0.020 | 0.002 | 0.006 | -0.002 |
| | (-0.046 - 0.006) | (-0.024 - 0.028) | (-0.019 - 0.032) | (-0.028 - 0.024) |
| PAK | -0.174*** | -0.135*** | -0.100*** | -0.111*** |
| | (-0.238 - -0.111) | (-0.196 - -0.073) | (-0.159 - -0.041) | (-0.169 - -0.053) |
| BNG | -0.178*** | -0.120*** | -0.071 | -0.077* |
| | (-0.268 - -0.089) | (-0.206 - -0.034) | (-0.157 - 0.016) | (-0.161 - 0.008) |
| AFR | -0.069*** | -0.046* | -0.041 | -0.053** |
| | (-0.118 - -0.020) | (-0.096 - 0.004) | (-0.089 - 0.008) | (-0.101 - -0.004) |
| JAM | -0.094*** | -0.066*** | -0.060*** | -0.065*** |
| | (-0.128 - -0.060) | (-0.101 - -0.031) | (-0.095 - -0.026) | (-0.099 - -0.032) |
| Age | | 0.012*** | 0.011*** | 0.010*** |
| | | (0.010 - 0.015) | (0.009 - 0.014) | (0.007 - 0.012) |
| Age squared | | -0.000*** | -0.000*** | -0.000*** |
| | | (-0.000 - -0.000) | (-0.000 - -0.000) | (-0.000 - -0.000) |
| Parental work status (ref. dual-earning hhld): | | | | |
| Non-working mother | | | -0.033*** | -0.027*** |
| | | | (-0.043 - -0.022) | (-0.037 - -0.017) |
| Non-working father | | | -0.038*** | -0.030*** |
| | | | (-0.057 - -0.018) | (-0.050 - -0.011) |
| Workless hhld | | | -0.146*** | -0.122*** |
| | | | (-0.175 - -0.117) | (-0.149 - -0.094) |
| Educational attainment (ref. no qualif.): | | | | |
| GCSE & other | | | | 0.138*** |
| | | | | (0.108 - 0.169) |
| A-level & other | | | | 0.191*** |
| | | | | (0.160 - 0.221) |
| Degree | | | | 0.202*** |
| | | | | (0.172 - 0.233) |
| Constant | 0.927*** | 0.694*** | 0.727*** | 0.553*** |
| | (0.923 - 0.932) | (0.633 - 0.755) | (0.668 - 0.786) | (0.489 - 0.616) |
| N | 30,949 | 30,949 | 30,949 | 30,949 |

*** p<0.01, ** p<0.05, * p<0.1. Robust ci in parentheses.

Notes: Models control for region and health status.

Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.8 Constituent and interaction terms of parental work status, degree, and age and ethnic origin. Probability of being employed (men). Linear probability models*

| *Parental work status#ethnic origin* | | *Degree#ethnic origin* | | *Age#ethnic origin* | |
|---|---|---|---|---|---|
| Country of origin (ref. UK): | | Country of origin (ref. UK): | | Country of origin (ref. UK): | |
| IRL | 0.016* | IRL | -0.006 | IRL | 0.050 |
| | (-0.002 - 0.034) | | (-0.031 - 0.019) | | (-0.030 - 0.129) |
| IND | 0.001 | IND | 0.047** | IND | -0.022 |
| | (-0.040 - 0.042) | | (0.011 - 0.083) | | (-0.138 - 0.094) |
| PAK | -0.047 | PAK | -0.089** | PAK | -0.145 |
| | (-0.147 - 0.052) | | (-0.164 - - 0.015) | | (-0.369 - 0.079) |
| BNG | -0.075 | BNG | -0.017 | BNG | -0.004 |
| | (-0.286 - 0.136) | | (-0.106 - 0.072) | | (-0.212 - 0.204) |
| AFR | -0.108** | AFR | -0.152** | AFR | -0.254** |
| | (-0.208 - - 0.008) | | (-0.269 - - 0.035) | | (-0.501 - - 0.006) |
| JAM | -0.193*** | JAM | -0.194*** | JAM | -0.373*** |
| | (-0.275 - - 0.110) | | (-0.262 - - 0.125) | | (-0.560 - - 0.185) |
| Parental work status (ref. dual-earning hhld): | | Degree | 0.045*** | Age | 0.003*** |
| Single-earning hhld | -0.044*** | | (0.034 - 0.057) | | (0.002 - 0.003) |
| | (-0.057 - - 0.030) | | | | |
| Workless hhld | -0.123*** | | | | |
| | (-0.164 - - 0.083) | | | | |
| Interaction term: | | Interaction term: | | Interaction term: | |
| 1b.coo#1b.p_workedr | 0.000 | 1b.coo#0b.degree | 0.000 | 1b.coo#co.dvage | 0.000 |
| | (0.000 - 0.000) | | (0.000 - 0.000) | | (0.000 - 0.000) |
| 1b.coo#2o.p_workedr | 0.000 | 1b.coo#1o.degree | 0.000 | 2.coo#c.dvage | -0.001 |
| | (0.000 - 0.000) | | (0.000 - 0.000) | | (-0.003 - 0.001) |
| 1b.coo#3o.p_workedr | 0.000 | 2o.coo#0b.degree | 0.000 | 3.coo#c.dvage | 0.001 |
| | (0.000 - 0.000) | | (0.000 - 0.000) | | (-0.001 - 0.004) |
| 2o.coo#1b.p_workedr | 0.000 | 2.coo#1.degree | 0.012 | 4.coo#c.dvage | 0.003 |
| | (0.000 - 0.000) | | (-0.021 - 0.044) | | (-0.004 - 0.009) |
| 2.coo#2.p_workedr | -0.061*** | 3o.coo#0b.degree | 0.000 | 5.coo#c.dvage | 0.000 |
| | (-0.105 - - 0.017) | | (0.000 - 0.000) | | (-0.007 - 0.007) |
| 2.coo#3.p_workedr | 0.049 | 3.coo#1.degree | -0.043 | 6.coo#c.dvage | 0.004 |
| | (-0.057 - 0.156) | | (-0.104 - 0.017) | | (-0.002 - 0.011) |
| 3o.coo#1b.p_workedr | 0.000 | 4o.coo#0b.degree | 0.000 | 7.coo#c.dvage | 0.006** |

| | | | | | |
|---|---|---|---|---|---|
| | (0.000 - 0.000) | | (0.000 - 0.000) | | (0.001 - 0.010) |
| 3.coo#2.p_workedr | 0.044 (-0.022 - 0.111) | 4.coo#1.degree | 0.076 (-0.032 - 0.184) | | |
| 3.coo#3.p_workedr | 0.114** (0.019 - 0.210) | 5o.coo#0b.degree | 0.000 (0.000 - 0.000) | | |
| 4o.coo#1b.p_workedr | 0.000 (0.000 - 0.000) | 5.coo#1.degree | 0.111* (-0.013 - 0.235) | | |
| 4.coo#2.p_workedr | -0.024 (-0.144 - 0.096) | 6o.coo#0b.degree | 0.000 (0.000 - 0.000) | | |
| 4.coo#3.p_workedr | -0.001 (-0.171 - 0.169) | 6.coo#1.degree | 0.108 (-0.067 - 0.283) | | |
| 5o.coo#1b.p_workedr | 0.000 (0.000 - 0.000) | 7o.coo#0b.degree | 0.000 (0.000 - 0.000) | | |
| 5.coo#2.p_workedr | 0.060 (-0.186 - 0.307) | 7.coo#1.degree | 0.125** (0.007 - 0.242) | | |
| 5.coo#3.p_workedr | 0.122 (-0.109 - 0.352) | | | | |
| 6o.coo#1b.p_workedr | 0.000 (0.000 - 0.000) | | | | |
| 6.coo#2.p_workedr | 0.094 (-0.050 - 0.238) | | | | |
| 6.coo#3.p_workedr | -0.196 (-0.451 - 0.059) | | | | |
| 7o.coo#1b.p_workedr | 0.000 (0.000 - 0.000) | | | | |
| 7.coo#2.p_workedr | 0.071 (-0.054 - 0.195) | | | | |
| 7.coo#3.p_workedr | 0.031 (-0.142 - 0.205) | | | | |
| Constant | 0.576*** (0.504 - 0.647) | Constant | 0.576*** (0.504 - 0.648) | Constant | 0.879*** (0.848 - 0.911) |
| N | 26,842 | N | 26,842 | N | 26,842 |

*** p<0.01, ** p<0.05, * p<0.1. Robust ci in parentheses.

Notes: Models control for region and health status; and for age, degree, and parental work status when not being interacted with ethnic origin.

Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.9 Constituent and interaction terms of parental work status, degree, and age and ethnic origin. Probability of being employed (women). Linear probability models*

| *Parental work status#ethnic origin* | | *Degree#ethnic origin* | | *Age#ethnic origin* | |
|---|---|---|---|---|---|
| Country of origin (ref. UK): | | Country of origin (ref. UK): | | Country of origin (ref. UK): | |
| IRL | -0.010 (-0.027 - 0.007) | IRL | 0.001 (-0.018 - 0.019) | IRL | 0.030 (-0.033 - 0.093) |
| IND | -0.006 (-0.035 - 0.024) | IND | 0.010 (-0.023 - 0.043) | IND | -0.010 (-0.110 - 0.091) |
| PAK | -0.102 (-0.223 - 0.020) | PAK | -0.144*** (-0.223 - - 0.065) | PAK | -0.399*** (-0.592 - - 0.207) |
| BNG | -0.176 (-0.417 - 0.065) | BNG | -0.121** (-0.242 - - 0.001) | BNG | -0.216 (-0.504 - 0.073) |
| AFR | -0.023 (-0.072 - 0.027) | AFR | -0.090** (-0.166 - - 0.013) | AFR | 0.039 (-0.144 - 0.221) |
| JAM | -0.048*** (-0.083 - - 0.013) | JAM | -0.083*** (-0.128 - - 0.037) | JAM | -0.053 (-0.184 - 0.078) |
| Parental work status (ref. dual-earning hhld): | | Degree | 0.043*** (0.035 - 0.051) | Age | 0.003*** (0.002 - 0.003) |
| Single-earning hhld | -0.032*** (-0.042 - - 0.022) | | | | |
| Workless hhld | -0.153*** (-0.187 - - 0.119) | | | | |
| Interaction term: | | Interaction term: | | Interaction term: | |
| 1b.coo#1b.p_workedr | 0.000 (0.000 - 0.000) | 1b.coo#0b.degree | 0.000 (0.000 - 0.000) | 1b.coo#co.dvage | 0.000 (0.000 - 0.000) |
| 1b.coo#2o.p_workedr | 0.000 (0.000 - 0.000) | 1b.coo#1o.degree | 0.000 (0.000 - 0.000) | 2.coo#c.dvage | -0.001 (-0.002 - 0.001) |
| 1b.coo#3o.p_workedr | 0.000 (0.000 - 0.000) | 2o.coo#0b.degree | 0.000 (0.000 - 0.000) | 3.coo#c.dvage | 0.000 (-0.002 - 0.003) |
| 2o.coo#1b.p_workedr | 0.000 (0.000 - 0.000) | 2.coo#1.degree | 0.002 (-0.025 - 0.030) | 4.coo#c.dvage | 0.010*** (0.004 - 0.015) |
| 2.coo#2.p_workedr | 0.009 (-0.022 - 0.041) | 3o.coo#0b.degree | 0.000 (0.000 - 0.000) | 5.coo#c.dvage | 0.005 (-0.005 - 0.014) |
| 2.coo#3.p_workedr | 0.128*** (0.064 - 0.191) | 3.coo#1.degree | -0.021 (-0.068 - 0.026) | 6.coo#c.dvage | -0.002 (-0.008 - 0.003) |
| 3o.coo#1b.p_workedr | 0.000 | 4o.coo#0b.degree | 0.000 | 7.coo#c.dvage | -0.000 |

| | | | | | |
|---|---|---|---|---|---|
| | (0.000 - 0.000) | | (0.000 - 0.000) | | (-0.003 - 0.003) |
| 3.coo#2.p_workedr | 0.013 | 4.coo#1.degree | 0.112** | | |
| | (-0.041 - 0.066) | | (0.004 - 0.221) | | |
| 3.coo#3.p_workedr | 0.052 | 5o.coo#0b.degree | 0.000 | | |
| | (-0.089 - 0.193) | | (0.000 - 0.000) | | |
| 4o.coo#1b.p_workedr | 0.000 | 5.coo#1.degree | 0.136* | | |
| | (0.000 - 0.000) | | (-0.014 - 0.287) | | |
| 4.coo#2.p_workedr | 0.007 | 6o.coo#0b.degree | 0.000 | | |
| | (-0.133 - 0.147) | | (0.000 - 0.000) | | |
| 4.coo#3.p_workedr | -0.021 | 6.coo#1.degree | 0.085* | | |
| | (-0.213 - 0.170) | | (-0.004 - 0.174) | | |
| 5o.coo#1b.p_workedr | 0.000 | 7o.coo#0b.degree | 0.000 | | |
| | (0.000 - 0.000) | | (0.000 - 0.000) | | |
| 5.coo#2.p_workedr | 0.078 | 7.coo#1.degree | 0.062** | | |
| | (-0.199 - 0.355) | | (0.005 - 0.119) | | |
| 5.coo#3.p_workedr | 0.183 | | | | |
| | (-0.081 - 0.447) | | | | |
| 6o.coo#1b.p_workedr | 0.000 | | | | |
| | (0.000 - 0.000) | | | | |
| 6.coo#2.p_workedr | -0.049 | | | | |
| | (-0.158 - 0.060) | | | | |
| 6.coo#3.p_workedr | -0.115 | | | | |
| | (-0.322 - 0.092) | | | | |
| 7o.coo#1b.p_workedr | 0.000 | | | | |
| | (0.000 - 0.000) | | | | |
| 7.coo#2.p_workedr | -0.045 | | | | |
| | (-0.129 - 0.040) | | | | |
| 7.coo#3.p_workedr | -0.022 | | | | |
| | (-0.157 - 0.113) | | | | |
| Constant | 0.712*** | Constant | 0.714*** | Constant | 0.854*** |
| | (0.654 - 0.770) | | (0.655 - 0.772) | | (0.828 - 0.881) |
| N | 30,949 | N | 30,949 | N | 30,949 |

*** p<0.01, ** p<0.05, * p<0.1. Robust ci in parentheses.

Notes: Models control for region and health status; and for age, degree, and parental work status when not being interacted with ethnic origin.

Source: *Understanding Society*, waves 1-4, author's analysis.

## 5.8 Appendix occupational attainment

*Table A5.10 Summary statistics (men)*

| Variables: | Range | UK M(SD)/P | IRL M(SD)/P | IND M(SD)/P | PAK M(SD)/P | BNG M(SD)/P | AFR M(SD)/P | JAM M(SD)/P |
|---|---|---|---|---|---|---|---|---|
| Respondents' class (DV): | 1/6 | | | | | | | |
| Management & prof. | | 39.27 | 43.80 | 49.37 | 23.07 | 27.46 | 39.62 | 30.51 |
| Intermediate | | 7.99 | 8.39 | 12.05 | 9.91 | 11.40 | 10.57 | 8.33 |
| Small emp./own account | | 12.35 | 11.10 | 9.22 | 14.86 | 8.81 | 9.43 | 5.95 |
| Lower supervisory & tech. | | 10.46 | 9.12 | 6.71 | 7.43 | 5.96 | 3.02 | 4.46 |
| Semi-routine & routine | | 20.58 | 17.38 | 12.58 | 23.84 | 22.80 | 15.47 | 20.68 |
| Unemployed | | 9.35 | 10.20 | 10.06 | 20.90 | 23.58 | 21.89 | 30.06 |
| Parental class: | 1/6 | | | | | | | |
| Management & prof. | | 33.10 | 31.41 | 34.17 | 10.99 | 5.18 | 41.89 | 26.34 |
| Intermediate | | 14.52 | 14.80 | 6.50 | 1.86 | 1.04 | 10.94 | 11.90 |
| Small emp./own account | | 9.87 | 10.54 | 5.45 | 21.98 | 13.21 | 8.30 | 6.85 |
| Lower supervisory & tech. | | 10.37 | 10.76 | 4.72 | 4.49 | 3.37 | 3.02 | 9.52 |
| Semi-routine & routine | | 23.38 | 22.25 | 33.33 | 25.85 | 27.98 | 13.96 | 23.07 |
| Not working | | 8.76 | 10.24 | 15.83 | 34.83 | 49.22 | 21.89 | 22.32 |
| Education: | 1/4 | | | | | | | |
| No qualification (ref.) | | 6.98 | 5.64 | 3.56 | 5.26 | 10.10 | 0.38 | 5.65 |
| GCSE & other | | 31.37 | 28.57 | 20.96 | 31.58 | 36.01 | 17.74 | 37.65 |
| A-level & other | | 35.87 | 34.77 | 32.29 | 29.26 | 30.83 | 30.94 | 39.29 |
| Degree | | 25.78 | 31.02 | 43.19 | 33.90 | 23.06 | 50.94 | 17.41 |
| Age | 16-64 | 42.88 | 42.71 | 35.99 | 32.38 | 29.99 | 33.13 | 38.27 |
| | | (12.09) | (11.30) | (10.41) | (8.93) | (8.02) | (9.43) | (11.25) |
| London | 0/1 | 5.43 | 11.88 | 36.06 | 12.69 | 67.36 | 62.26 | 57.14 |
| Health | 1-5 | 2.37 | 2.48 | 2.41 | 2.38 | 2.40 | 2.16 | 2.48 |
| | | (0.99) | (1.04) | (0.96) | (1.02) | (1.05) | (0.98) | (1.03) |
| *N* | | 22,143 | 2,324 | 954 | 646 | 386 | 265 | 672 |

M (mean), SD (standard deviation), P(percentage).
Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.11 Summary statistics (women)*

| | | UK | IRL | IND | PAK | BNG | AFR | JAM |
|---|---|---|---|---|---|---|---|---|
| Variables: | Range | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P | M(SD)/P |
| Respondents' class (DV): | 1/6 | | | | | | | |
| Management & prof. | | 38.07 | 45.62 | 38.45 | 23.57 | 26.82 | 44.77 | 35.62 |
| Intermediate | | 18.21 | 15.46 | 21.35 | 21.29 | 15.45 | 13.40 | 19.39 |
| Small emp./own account | | 6.07 | 5.52 | 5.18 | 3.61 | 1.17 | 5.23 | 3.34 |
| Lower supervisory & tech. | | 4.41 | 3.93 | 3.63 | 1.90 | 5.83 | 2.61 | 2.50 |
| Semi-routine & routine | | 26.13 | 22.11 | 21.35 | 21.86 | 23.32 | 17.65 | 20.13 |
| Unemployed | | 7.10 | 7.37 | 10.05 | 27.76 | 27.41 | 16.34 | 19.02 |
| Parental class: | 1/6 | | | | | | | |
| Management & prof. | | 33.76 | 32.12 | 34.92 | 15.78 | 7.29 | 50.65 | 24.86 |
| Intermediate | | 14.05 | 12.89 | 6.53 | 1.90 | 0.58 | 7.52 | 9.18 |
| Small emp./own account | | 10.86 | 9.22 | 9.02 | 18.82 | 11.37 | 5.56 | 8.91 |
| Lower supervisory & tech. | | 9.46 | 11.30 | 6.74 | 10.08 | 1.17 | 3.92 | 7.98 |
| Semi-routine & routine | | 23.12 | 22.26 | 30.88 | 25.67 | 28.57 | 12.42 | 27.74 |
| Not working | | 8.75 | 12.21 | 11.92 | 27.76 | 51.02 | 19.93 | 21.34 |
| Education: | 1/4 | | | | | | | |
| No qualification (ref.) | | 6.28 | 5.29 | 2.49 | 1.33 | 2.62 | 0.98 | 2.88 |
| GCSE & other | | 31.83 | 28.50 | 21.24 | 27.19 | 25.66 | 16.67 | 30.43 |
| A-level & other | | 35.28 | 34.09 | 40.00 | 40.87 | 36.15 | 35.95 | 35.06 |
| Degree | | 26.60 | 32.12 | 36.27 | 30.61 | 35.57 | 46.41 | 31.63 |
| Age | 16-64 | 42.25 | 43.24 | 36.25 | 30.89 | 26.94 | 35.68 | 39.94 |
| | | (11.65) | (11.05) | (10.20) | (8.74) | (7.00) | (10.38) | (10.10) |
| London | 0/1 | 4.62 | 11.60 | 29.43 | 18.25 | 64.14 | 63.40 | 57.42 |
| Health | 1-5 | 2.34 | 2.38 | 2.42 | 2.49 | 2.43 | 2.16 | 2.63 |
| | | (0.99) | (1.01) | (1.02) | (1.03) | (0.98) | (0.89) | (1.00) |
| *N* | | 25,017 | 2,646 | 965 | 526 | 343 | 306 | 1,078 |

M (mean), SD (standard deviation), P(percentage).
Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.12 Ethnic origin differences on occupational attainment (men). AME after multinomial logistic regression*

| | *1. Professional and managerial* | | | *2. Intermediate* | | | *3. Semi-routine and routine* | | | *4. Unemployment* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M1 | M2 | M3 | M1 | M2 | M3 | M1 | M2 | M3 | M1 | M2 | M3 |
| Country of origin (ref. UK): | | | | | | | | | | | | |
| IRL | 0.026 | 0.03 | 0.008 | 0.004 | 0.002 | 0.007 | -0.032 | -0.035+ | -0.018 | 0.002 | 0.002 | 0.003 |
| | [-0.013,0.065] | [-0.008,0.068] | [-0.027,0.043] | [-0.028,0.036] | [-0.030,0.035] | [-0.026,0.039] | [-0.068,0.004] | [-0.070,0.000] | [-0.052,0.016] | [-0.014,0.018] | [-0.013,0.017] | [-0.012,0.019] |
| IND | 0.083* | 0.098** | 0.034 | 0.045 | 0.048 | 0.071* | -0.115** | -0.129** | -0.092** | -0.013 | -0.017 | -0.012 |
| | [0.020,0.146] | [0.037,0.160] | [-0.022,0.090] | [-0.015,0.104] | [-0.012,0.109] | [0.008,0.134] | [-0.168,-0.062] | [-0.179,-0.080] | [-0.148,-0.037] | [-0.035,0.009] | [-0.038,0.004] | [-0.035,0.011] |
| PAK | -0.109** | -0.057 | -0.122** | 0.033 | 0.036 | 0.044 | 0.015 | -0.019 | 0.034 | 0.061* | 0.039+ | 0.044* |
| | [-0.175,-0.043] | [-0.130,0.016] | [-0.182,-0.063] | [-0.026,0.092] | [-0.024,0.097] | [-0.017,0.105] | [-0.052,0.083] | [-0.084,0.046] | [-0.034,0.102] | [0.012,0.110] | [-0.003,0.081] | [0.001,0.088] |
| BNG | -0.163** | -0.085 | -0.06 | 0.087 | 0.1 | 0.088 | 0.039 | -0.023 | -0.035 | 0.037 | 0.007 | 0.006 |
| | [-0.250,-0.076] | [-0.191,0.021] | [-0.148,0.028] | [-0.029,0.203] | [-0.019,0.220] | [-0.026,0.202] | [-0.090,0.168] | [-0.153,0.108] | [-0.155,0.086] | [-0.025,0.098] | [-0.041,0.056] | [-0.041,0.054] |
| AFR | -0.072 | -0.082 | -0.117** | 0.061 | 0.061 | 0.057 | -0.079 | -0.065 | -0.03 | 0.090* | 0.086* | 0.090* |
| | [-0.180,0.035] | [-0.191,0.027] | [-0.186,-0.049] | [-0.049,0.172] | [-0.048,0.169] | [-0.052,0.167] | [-0.204,0.047] | [-0.192,0.063] | [-0.156,0.096] | [0.014,0.165] | [0.012,0.160] | [0.015,0.165] |
| JAM | -0.071+ | -0.034 | 0.009 | -0.075** | -0.072** | -0.080** | 0.031 | 0.012 | -0.017 | 0.114** | 0.095** | 0.087** |
| | [-0.154,0.013] | [-0.111,0.043] | [-0.064,0.083] | [-0.117,-0.032] | [-0.116,-0.028] | [-0.122,-0.039] | [-0.042,0.105] | [-0.055,0.078] | [-0.078,0.045] | [0.066,0.162] | [0.050,0.139] | [0.045,0.130] |
| Social origin (ref. salariat): | | | | | | | | | | | | |
| Intermediate | | -0.146** | -0.071** | | 0.052** | 0.031* | | 0.085** | 0.037** | | 0.009 | 0.003 |
| | | [-0.174,-0.117] | [-0.099,-0.044] | | [0.027,0.077] | [0.005,0.056] | | [0.060,0.110] | [0.012,0.062] | | [-0.002,0.019] | [-0.008,0.014] |

| | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Semi-/routine | | -0.246** | -0.136** | | -0.008 | -0.031** | | 0.220** | 0.141** | | 0.034** | 0.026** |
| | | [-0.272,-0.220] | [-0.161,-0.111] | | [-0.029,0.014] | [-0.054,-0.009] | | [0.195,0.245] | [0.117,0.166] | | [0.023,0.045] | [0.015,0.038] |
| Workless hhld. | | -0.234** | -0.142** | | -0.002 | -0.023 | | 0.165** | 0.102** | | 0.071** | 0.064** |
| | | [-0.271,-0.196] | [-0.178,-0.106] | | [-0.033,0.029] | [-0.055,0.008] | | [0.128,0.201] | [0.067,0.137] | | [0.050,0.092] | [0.043,0.084] |
| Degree | | | 0.418** | | | -0.083** | | | -0.304** | | | -0.030** |
| | | | [0.393,0.442] | | | [-0.103,-0.063] | | | [-0.323,-0.285] | | | [-0.041,-0.020] |
| Age | 0.003** | 0.004** | 0.003** | 0.002** | 0.002** | 0.002** | -0.003** | -0.004** | -0.003** | -0.002** | -0.002** | -0.002** |
| | [0.002,0.004] | [0.003,0.004] | [0.002,0.004] | [0.001,0.003] | [0.001,0.003] | [0.001,0.003] | [-0.004,-0.002] | [-0.004,-0.003] | [-0.004,-0.002] | [-0.003,-0.001] | [-0.003,-0.001] | [-0.002,-0.001] |
| London | 0.102** | 0.076** | 0.024 | 0.025 | 0.028 | 0.044* | -0.132** | -0.114** | -0.082** | 0.005 | 0.01 | 0.015 |
| | [0.057,0.147] | [0.034,0.119] | [-0.015,0.063] | [-0.014,0.064] | [-0.011,0.067] | [0.003,0.084] | [-0.168,-0.095] | [-0.150,-0.077] | [-0.121,-0.044] | [-0.013,0.023] | [-0.009,0.029] | [-0.005,0.035] |
| Health | -0.066** | -0.056** | -0.033** | -0.007+ | -0.007+ | -0.012** | 0.039** | 0.031** | 0.015** | 0.034** | 0.032** | 0.030** |
| | [-0.075,-0.057] | [-0.065,-0.047] | [-0.042,-0.025] | [-0.015,0.001] | [-0.014,0.001] | [-0.020,-0.004] | [0.031,0.047] | [0.023,0.039] | [0.007,0.023] | [0.029,0.039] | [0.027,0.037] | [0.026,0.035] |
| N | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 |

+ p<0.10, * p<0.05, ** p<0.01. Robust ci in parentheses.

Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.13 Ethnic origin differences on occupational attainment (men). AME after multinomial logistic regression*

| | *1. Professional and managerial* | | | *2. Intermediate* | | | *3. Semi-routine and routine* | | | *4. Unemployment* | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | M1 | M2 | M3 | M1 | M2 | M3 | M1 | M2 | M3 | M1 | M2 | M3 |
| Country of origin (ref. UK): | | | | | | | | | | | | |
| IRL | 0.063** | 0.070** | 0.047** | -0.035* | -0.034* | -0.027+ | -0.024 | -0.030+ | -0.014 | -0.004 | -0.007 | -0.005 |
| | [0.027,0.100] | [0.035,0.106] | [0.014,0.080] | [-0.064,-0.005] | [-0.063,-0.004] | [-0.057,0.003] | [-0.058,0.009] | [-0.062,0.002] | [-0.046,0.017] | [-0.017,0.008] | [-0.019,0.005] | [-0.018,0.007] |
| IND | 0.022 | 0.031 | 0.012 | 0.027 | 0.032 | 0.037 | -0.050+ | -0.059* | -0.046+ | 0.001 | -0.004 | -0.003 |
| | [-0.039,0.082] | [-0.029,0.091] | [-0.043,0.067] | [-0.027,0.082] | [-0.024,0.087] | [-0.018,0.093] | [-0.105,0.006] | [-0.114,-0.004] | [-0.101,0.009] | [-0.019,0.020] | [-0.023,0.015] | [-0.022,0.017] |
| PAK | -0.104* | -0.061 | -0.100* | 0.087* | 0.106* | 0.113* | -0.066+ | -0.098** | -0.073* | 0.082** | 0.054** | 0.060** |
| | [-0.185,-0.022] | [-0.150,0.028] | [-0.179,-0.021] | [0.000,0.175] | [0.017,0.194] | [0.026,0.199] | [-0.135,0.004] | [-0.164,-0.033] | [-0.142,-0.003] | [0.038,0.126] | [0.018,0.090] | [0.023,0.097] |
| BNG | -0.079 | -0.012 | -0.042 | -0.073* | -0.057 | -0.054 | 0.093 | 0.041 | 0.065 | 0.059* | 0.028 | 0.031 |
| | [-0.188,0.031] | [-0.128,0.104] | [-0.123,0.039] | [-0.145,-0.002] | [-0.136,0.022] | [-0.133,0.025] | [-0.037,0.222] | [-0.082,0.165] | [-0.044,0.174] | [0.005,0.114] | [-0.018,0.074] | [-0.016,0.077] |
| AFR | 0.039 | 0.026 | -0.002 | -0.021 | -0.012 | -0.006 | -0.051 | -0.039 | -0.019 | 0.032 | 0.025 | 0.027 |
| | [-0.066,0.144] | [-0.083,0.135] | [-0.095,0.091] | [-0.101,0.060] | [-0.094,0.071] | [-0.090,0.078] | [-0.138,0.037] | [-0.133,0.055] | [-0.110,0.071] | [-0.011,0.075] | [-0.017,0.066] | [-0.015,0.070] |
| JAM | -0.014 | 0.013 | 0.002 | -0.014 | -0.007 | -0.004 | -0.016 | -0.037 | -0.028 | 0.044** | 0.031* | 0.031* |
| | [-0.076,0.048] | [-0.050,0.076] | [-0.051,0.054] | [-0.068,0.039] | [-0.061,0.047] | [-0.058,0.050] | [-0.081,0.050] | [-0.100,0.026] | [-0.088,0.031] | [0.017,0.071] | [0.006,0.055] | [0.006,0.055] |
| Social origin (ref. salariat): | | | | | | | | | | | | |
| Intermediate | | -0.112** | -0.040** | | 0.030* | 0.004 | | 0.083** | 0.041** | | 0.000 | -0.005 |

| | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | [-0.139,-0.085] | [-0.065,-0.015] | | [0.005,0.054] | [-0.020,0.029] | | [0.059,0.107] | [0.017,0.065] | | [-0.008,0.008] | [-0.014,0.003] |
| Semi-/routine | | -0.190** | -0.079** | | -0.016 | -0.048** | | 0.177** | 0.106** | | 0.029** | 0.021** |
| | | [-0.214,-0.166] | [-0.102,-0.055] | | [-0.038,0.005] | [-0.070,-0.026] | | [0.154,0.200] | [0.083,0.129] | | [0.019,0.039] | [0.011,0.030] |
| Workless hhld. | | -0.209** | -0.097** | | -0.049** | -0.078** | | 0.182** | 0.110** | | 0.076** | 0.065** |
| | | [-0.245,-0.174] | [-0.130,-0.065] | | [-0.079,-0.019] | [-0.108,-0.048] | | [0.148,0.217] | [0.078,0.142] | | [0.059,0.093] | [0.049,0.081] |
| Degree | | | 0.422** | | | -0.111** | | | -0.278** | | | -0.032** |
| | | | [0.400,0.443] | | | [-0.130,-0.092] | | | [-0.296,-0.260] | | | [-0.040,-0.025] |
| Age | 0.001** | 0.002** | 0.003** | 0.002** | 0.002** | 0.001** | -0.001+ | -0.001** | -0.002** | -0.002** | -0.002** | -0.002** |
| | [0.000,0.002] | [0.001,0.002] | [0.002,0.003] | [0.001,0.003] | [0.001,0.002] | [0.000,0.002] | [-0.002,0.000] | [-0.002,-0.001] | [-0.003,-0.001] | [-0.002,-0.002] | [-0.002,-0.002] | [-0.002,-0.002] |
| London | 0.065** | 0.054** | -0.008 | -0.007 | -0.007 | 0.012 | -0.087** | -0.077** | -0.041* | 0.029** | 0.031** | 0.037** |
| | [0.025,0.106] | [0.014,0.093] | [-0.045,0.029] | [-0.043,0.028] | [-0.043,0.028] | [-0.025,0.049] | [-0.123,-0.051] | [-0.113,-0.042] | [-0.079,-0.004] | [0.011,0.047] | [0.012,0.049] | [0.017,0.057] |
| Health | -0.071** | -0.061** | -0.037** | -0.012** | -0.011** | -0.017** | 0.054** | 0.046** | 0.030** | 0.029** | 0.026** | 0.024** |
| | [-0.079,-0.062] | [-0.070,-0.053] | [-0.045,-0.029] | [-0.020,-0.005] | [-0.018,-0.003] | [-0.025,-0.010] | [0.047,0.062] | [0.038,0.054] | [0.023,0.038] | [0.025,0.033] | [0.023,0.030] | [0.021,0.028] |
| N | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 |

+ p<0.10, * p<0.05, ** p<0.01. Robust ci in parentheses.

Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.14 The effect of social origin and education on occupational attainment (men). AME after multinomial logistic regression*

| | 1. Salariat | | 2. Intermediate | | 3. Semi-/routine | | 4. Unemployed | |
|---|---|---|---|---|---|---|---|---|
| Social origin (ref. salariat): | | | | | | | | |
| Intermediate | -0.147** | -0.072** | 0.052** | 0.031* | 0.086** | 0.038** | 0.009+ | 0.003 |
| | [-0.176,-0.118] | [-0.100,-0.045] | [0.027,0.077] | [0.006,0.057] | [0.061,0.111] | [0.012,0.063] | [-0.002,0.020] | [-0.008,0.014] |
| Semi-/routine | -0.246** | -0.137** | -0.007 | -0.030** | 0.219** | 0.141** | 0.034** | 0.026** |
| | [-0.272,-0.220] | [-0.162,-0.112] | [-0.029,0.015] | [-0.053,-0.008] | [0.195,0.244] | [0.117,0.165] | [0.023,0.045] | [0.015,0.037] |
| Workless HH | -0.236** | -0.147** | 0.000 | -0.021 | 0.161** | 0.100** | 0.075** | 0.067** |
| | [-0.273,-0.199] | [-0.183,-0.111] | [-0.031,0.031] | [-0.052,0.011] | [0.125,0.197] | [0.066,0.135] | [0.054,0.095] | [0.047,0.088] |
| Degree | | 0.416** | | -0.081** | | -0.305** | | -0.030** |
| | | [0.392,0.440] | | [-0.101,-0.061] | | [-0.324,-0.287] | | [-0.041,-0.019] |
| Age | 0.004** | 0.003** | 0.002** | 0.002** | -0.004** | -0.003** | -0.002** | -0.002** |
| | [0.003,0.004] | [0.002,0.004] | [0.001,0.003] | [0.001,0.002] | [-0.004,-0.003] | [-0.004,-0.002] | [-0.003,-0.002] | [-0.002,-0.001] |
| London | 0.078** | 0.021 | 0.029 | 0.046* | -0.125** | -0.091** | 0.018+ | 0.024* |
| | [0.037,0.118] | [-0.016,0.058] | [-0.007,0.066] | [0.008,0.084] | [-0.158,-0.091] | [-0.127,-0.055] | [-0.001,0.037] | [0.004,0.044] |
| Health | -0.056** | -0.033** | -0.007+ | -0.012** | 0.030** | 0.014** | 0.032** | 0.030** |
| | [-0.065,-0.047] | [-0.042,-0.025] | [-0.014,0.001] | [-0.019,-0.004] | [0.022,0.038] | [0.007,0.022] | [0.028,0.037] | [0.026,0.035] |
| N | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 | 25,521 |

+ p<0.10, * p<0.05, ** p<0.01. Robust ci in parentheses.

Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.15 The effect of social origin and education on occupational attainment (women). AME after multinomial logistic regression*

| | 1. Salariat | | 2. Intermediate | | 3. Semi-/routine | | 4. Unemployed | |
|---|---|---|---|---|---|---|---|---|
| Social origin (ref. salariat): | | | | | | | | |
| Intermediate | -0.113** | -0.041** | 0.030* | 0.004 | 0.084** | 0.041** | -0.000 | -0.005 |
| | [-0.140,-0.086] | [-0.066,-0.016] | [0.006,0.054] | [-0.020,0.029] | [0.060,0.107] | [0.017,0.065] | [-0.008,0.008] | [-0.013,0.004] |
| Semi-/routine | -0.190** | -0.080** | -0.016 | -0.047** | 0.176** | 0.105** | 0.030** | 0.022** |
| | [-0.214,-0.165] | [-0.103,-0.056] | [-0.037,0.006] | [-0.070,-0.025] | [0.153,0.198] | [0.082,0.128] | [0.020,0.039] | [0.012,0.031] |
| Workless HH | -0.208** | -0.098** | -0.049** | -0.078** | 0.178** | 0.108** | 0.079** | 0.068** |
| | [-0.243,-0.173] | [-0.131,-0.066] | [-0.079,-0.019] | [-0.107,-0.048] | [0.144,0.212] | [0.076,0.140] | [0.063,0.096] | [0.052,0.084] |
| Degree | | 0.422** | | -0.111** | | -0.279** | | -0.032** |
| | | [0.400,0.444] | | [-0.130,-0.092] | | [-0.296,-0.261] | | [-0.039,-0.024] |
| Age | 0.002** | 0.003** | 0.002** | 0.001** | -0.001** | -0.002** | -0.002** | -0.002** |
| | [0.001,0.002] | [0.002,0.003] | [0.001,0.002] | [0.000,0.002] | [-0.002,-0.000] | [-0.002,-0.001] | [-0.002,-0.002] | [-0.002,-0.002] |
| London | 0.060** | -0.007 | -0.009 | 0.011 | -0.087** | -0.048** | 0.036** | 0.044** |
| | [0.023,0.097] | [-0.041,0.028] | [-0.042,0.024] | [-0.023,0.046] | [-0.120,-0.054] | [-0.083,-0.013] | [0.019,0.054] | [0.025,0.062] |
| Health | -0.061** | -0.037** | -0.011** | -0.017** | 0.046** | 0.030** | 0.026** | 0.024** |
| | [-0.070,-0.053] | [-0.045,-0.029] | [-0.018,-0.003] | [-0.025,-0.010] | [0.038,0.053] | [0.023,0.038] | [0.023,0.030] | [0.021,0.028] |
| N | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 | 29,463 |

+ p<0.10, * p<0.05, ** p<0.01. Robust ci in parentheses.

Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.16 Interaction effects on occupational attainment (men). Parameter estimates*

| | Salariat | Intermediate | Semi-/routine | Unemployment |
|---|---|---|---|---|
| Ethnic origin (ref. UK): | | | | |
| IRL | -0.100 | 0.260 | -0.058 | -0.465 |
| | (-0.447 - 0.248) | (-0.137 - 0.656) | (-0.436 - 0.320) | (-1.028 - 0.098) |
| IND | 0.061 | 0.437 | -0.553 | 0.150 |
| | (-0.532 - 0.654) | (-0.175 - 1.049) | (-1.277 - 0.170) | (-0.597 - 0.897) |
| PAK | -1.979*** | -0.064 | 0.744 | 1.450*** |
| | (-3.040 - -0.918) | (-1.149 - 1.020) | (-0.241 - 1.729) | (0.364 - 2.535) |
| BNG | -1.598** | 0.875 | -0.212 | 1.343* |
| | (-2.939 - -0.257) | (-0.370 - 2.120) | (-1.971 - 1.547) | (-0.200 - 2.885) |
| AFR | -1.291*** | 0.666 | -0.097 | 1.333*** |
| | (-2.241 - -0.341) | (-0.479 - 1.810) | (-1.560 - 1.366) | (0.372 - 2.294) |
| JAM | 0.080 | -0.589 | -0.588 | 1.655*** |
| | (-0.815 - 0.975) | (-1.291 - 0.114) | (-1.337 - 0.160) | (1.028 - 2.281) |
| Degree | 1.881*** | -0.666*** | -1.995*** | -0.674*** |
| | (1.749 - 2.013) | (-0.827 - -0.504) | (-2.190 - -1.800) | (-0.931 - -0.417) |
| Social origin (ref. salariat): | | | | |
| Intermediate | -0.414*** | 0.262*** | 0.211*** | 0.113 |
| | (-0.562 - -0.265) | (0.104 - 0.420) | (0.058 - 0.364) | (-0.128 - 0.355) |
| Semi-/routine | -0.729*** | -0.190** | 0.751*** | 0.439*** |
| | (-0.868 - -0.589) | (-0.347 - -0.033) | (0.611 - 0.891) | (0.222 - 0.657) |
| Workless HH | -0.771*** | -0.151 | 0.519*** | 0.940*** |
| | (-0.992 - -0.551) | (-0.388 - 0.086) | (0.314 - 0.725) | (0.660 - 1.221) |
| Ethnic origin *degree: | | | | |
| 2.coo#1.degree | -0.091 | 0.222 | -0.279 | -0.124 |
| | (-0.504 - 0.321) | (-0.285 - 0.730) | (-0.862 - 0.305) | (-0.782 - 0.534) |
| 3.coo#1.degree | -0.193 | -0.226 | -0.099 | 0.658 |
| | (-0.771 - 0.386) | (-0.893 - 0.441) | (-0.866 - 0.669) | (-0.214 - 1.530) |
| 4.coo#1.degree | 0.311 | 0.455 | 0.603* | 0.224 |
| | (-0.387 - 1.009) | (-0.266 - 1.176) | (-0.103 - 1.310) | (-0.718 - 1.166) |
| 5.coo#1.degree | 0.751 | -1.149** | 1.402** | -0.982 |
| | (-0.259 - 1.760) | (-2.261 - -0.036) | (0.227 - 2.576) | (-3.070 - 1.106) |
| 6.coo#1.degree | 0.772 | -0.347 | 0.480 | -0.316 |
| | (-0.584 - 2.129) | (-1.376 - 0.683) | (-0.731 - 1.691) | (-2.040 - 1.408) |
| 7.coo#1.degree | 0.013 | 0.122 | 0.875** | -0.791 |
| | (-0.723 - 0.750) | (-0.818 - 1.062) | (0.076 - 1.674) | (-2.039 - 0.458) |
| Ethnic origin *social origin: | | | | |
| 2.coo#2.p_class | 0.539** | -0.695** | -0.026 | 0.433 |
| | (0.055 - 1.023) | (-1.239 - -0.151) | (-0.563 - 0.511) | (-0.299 - 1.165) |
| 2.coo#3.p_class | 0.076 | -0.274 | 0.015 | 0.804** |
| | (-0.384 - 0.535) | (-0.789 - 0.241) | (-0.469 - 0.498) | (0.136 - 1.471) |
| 2.coo#4.p_class | 0.084 | -0.038 | -0.116 | 0.551 |
| | (-0.589 - 0.757) | (-0.718 - 0.642) | (-0.720 - 0.488) | (-0.249 - 1.351) |
| 3.coo#2.p_class | 0.473 | 0.130 | -0.548 | -0.668 |

| | | | | |
|---|---|---|---|---|
| | (-0.497 - 1.443) | (-0.846 - 1.106) | (-1.908 - 0.812) | (-1.915 - 0.580) |
| 3.coo#3.p_class | 0.191 | 0.340 | -0.031 | -0.750 |
| | (-0.468 - 0.851) | (-0.409 - 1.088) | (-0.880 - 0.818) | (-1.727 - 0.226) |
| 3.coo#4.p_class | 0.493 | -0.704 | 0.714 | -1.050** |
| | (-0.330 - 1.316) | (-1.595 - 0.187) | (-0.280 - 1.707) | (-2.087 - -0.012) |
| 4.coo#2.p_class | 1.145** | -0.045 | -0.324 | -1.245* |
| | (0.007 - 2.282) | (-1.289 - 1.198) | (-1.472 - 0.824) | (-2.669 - 0.180) |
| 4.coo#3.p_class | 1.826*** | -0.054 | -0.859 | -1.061 |
| | (0.667 - 2.985) | (-1.269 - 1.160) | (-1.957 - 0.240) | (-2.371 - 0.250) |
| 4.coo#4.p_class | 0.917 | 0.659 | -1.145** | -0.923 |
| | (-0.249 - 2.084) | (-0.576 - 1.894) | (-2.244 - -0.045) | (-2.297 - 0.451) |
| 5.coo#2.p_class | 0.896 | -0.983 | 0.909 | -1.899* |
| | (-0.968 - 2.759) | (-3.338 - 1.372) | (-1.614 - 3.432) | (-3.882 - 0.083) |
| 5.coo#3.p_class | 1.431* | -0.590 | -0.377 | -0.513 |
| | (-0.074 - 2.936) | (-2.049 - 0.870) | (-2.207 - 1.452) | (-2.488 - 1.462) |
| 5.coo#4.p_class | 1.094 | 0.208 | -0.378 | -1.468* |
| | (-0.352 - 2.541) | (-1.162 - 1.578) | (-2.221 - 1.465) | (-3.128 - 0.193) |
| 6.coo#2.p_class | -0.144 | 0.375 | -0.533 | -0.201 |
| | (-1.306 - 1.019) | (-0.848 - 1.598) | (-2.295 - 1.229) | (-1.629 - 1.227) |
| 6.coo#3.p_class | 0.439 | 0.005 | 0.153 | -1.316 |
| | (-0.782 - 1.660) | (-1.722 - 1.731) | (-1.634 - 1.940) | (-2.984 - 0.352) |
| 6.coo#4.p_class | 0.409 | -1.355 | -0.021 | 0.103 |
| | (-0.748 - 1.566) | (-3.227 - 0.517) | (-1.563 - 1.521) | (-1.312 - 1.519) |
| 7.coo#2.p_class | 0.043 | -0.379 | 0.760 | -0.676 |
| | (-1.118 - 1.204) | (-1.517 - 0.759) | (-0.221 - 1.740) | (-1.643 - 0.292) |
| 7.coo#3.p_class | 0.006 | 0.191 | 0.290 | -0.516 |
| | (-0.992 - 1.004) | (-0.728 - 1.110) | (-0.577 - 1.156) | (-1.401 - 0.369) |
| 7.coo#4.p_class | -0.215 | -0.041 | 0.713 | -1.160** |
| | (-1.319 - 0.889) | (-1.013 - 0.931) | (-0.207 - 1.633) | (-2.063 - -0.258) |
| Age | 0.172*** | 0.066*** | -0.121*** | -0.180*** |
| | (0.144 - 0.200) | (0.038 - 0.094) | (-0.145 - -0.096) | (-0.215 - -0.145) |
| Age squared | -0.002*** | -0.001*** | 0.001*** | 0.002*** |
| | (-0.002 - -0.002) | (-0.001 - -0.000) | (0.001 - 0.002) | (0.001 - 0.002) |
| London | 0.089 | 0.233** | -0.477*** | 0.214 |
| | (-0.119 - 0.297) | (0.009 - 0.458) | (-0.708 - -0.245) | (-0.057 - 0.485) |
| Health | -0.186*** | -0.079*** | 0.076*** | 0.484*** |
| | (-0.231 - -0.142) | (-0.128 - -0.031) | (0.033 - 0.119) | (0.414 - 0.554) |
| Constant | -3.793*** | -2.601*** | 1.775*** | -0.253 |
| | (-4.370 - -3.217) | (-3.167 - -2.035) | (1.287 - 2.263) | (-0.952 - 0.447) |
| N | 25,521 | 25,521 | 25,521 | 25,521 |

*** p<0.01, ** p<0.05, * p<0.1. Robust ci in parentheses.

Source: *Understanding Society*, waves 1-4, author's analysis.

*Table A5.17 Interaction effects on occupational attainment (women). Parameter estimates*

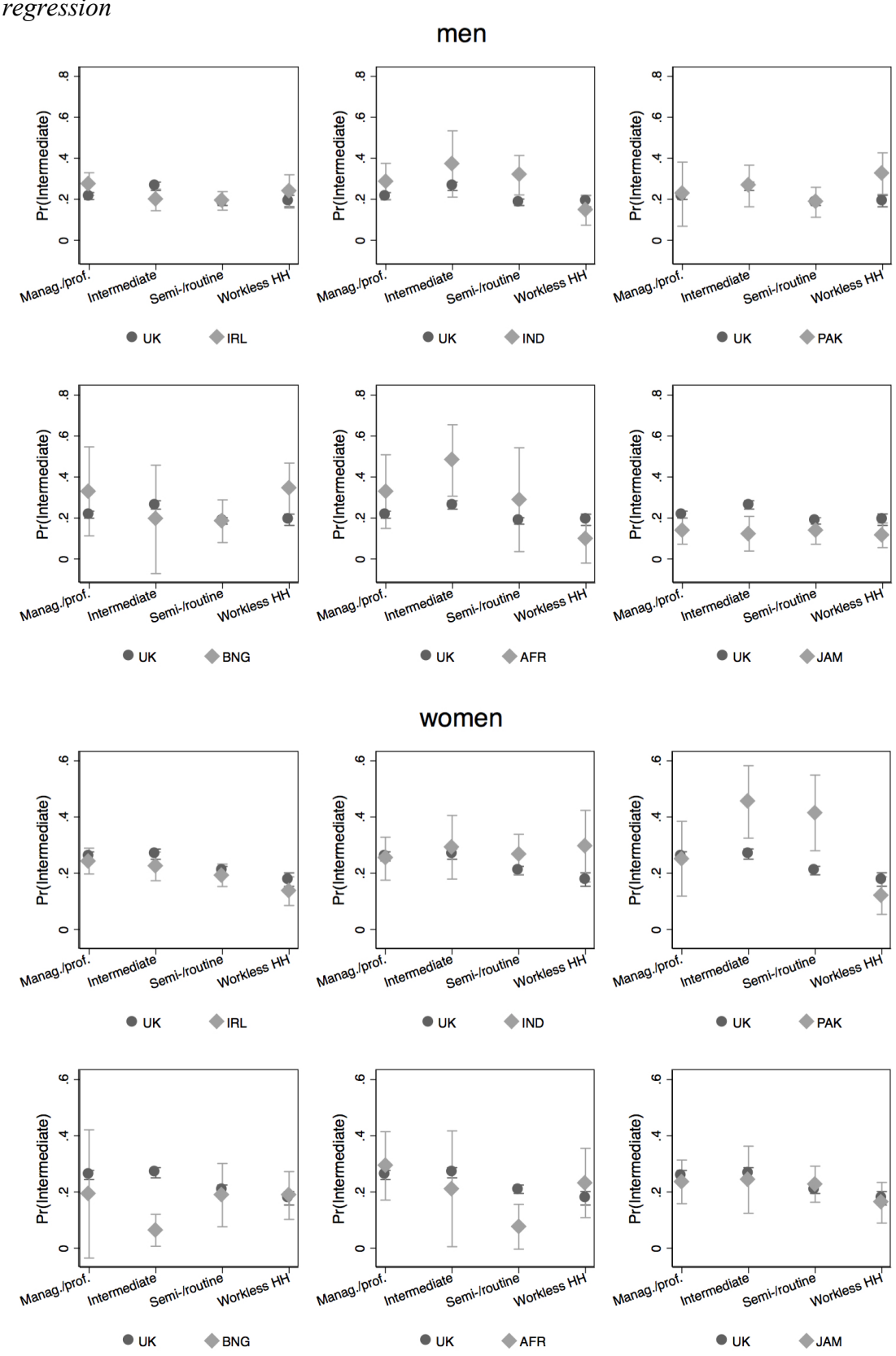
| | Salariat | Intermediate | Semi-/routine | Unemployment |
|---|---|---|---|---|
| Ethnic origin (ref. UK): | | | | |
| IRL | 0.286 | -0.106 | -0.261 | 0.182 |
| | (-0.057 - 0.628) | (-0.441 - 0.229) | (-0.623 - 0.100) | (-0.324 - 0.689) |
| IND | 0.078 | -0.077 | -0.053 | 0.181 |
| | (-0.494 - 0.651) | (-0.618 - 0.463) | (-0.628 - 0.522) | (-0.603 - 0.965) |
| PAK | -0.554 | -0.181 | -0.336 | 1.479*** |
| | (-1.687 - 0.578) | (-1.056 - 0.694) | (-1.288 - 0.615) | (0.902 - 2.057) |
| BNG | -0.625 | -0.567 | 0.373 | -0.040 |
| | (-2.122 - 0.873) | (-2.365 - 1.230) | (-0.955 - 1.702) | (-2.259 - 2.179) |
| AFR | -1.052** | 0.198 | 0.321 | 1.052* |
| | (-2.024 - -0.079) | (-0.671 - 1.067) | (-0.518 - 1.160) | (-0.059 - 2.163) |
| JAM | -0.582* | -0.195 | 0.715** | 0.159 |
| | (-1.183 - 0.018) | (-0.726 - 0.335) | (0.125 - 1.305) | (-0.688 - 1.006) |
| Degree | 1.895*** | -0.753*** | -1.735*** | -0.778*** |
| | (1.775 - 2.015) | (-0.894 - -0.612) | (-1.898 - -1.572) | (-0.998 - -0.559) |
| Social origin (ref. salariat): | | | | |
| Intermediate | -0.194*** | 0.043 | 0.225*** | -0.161 |
| | (-0.332 - -0.057) | (-0.094 - 0.179) | (0.084 - 0.367) | (-0.397 - 0.075) |
| Semi-/routine | -0.438*** | -0.282*** | 0.588*** | 0.464*** |
| | (-0.570 - -0.306) | (-0.419 - -0.146) | (0.458 - 0.718) | (0.257 - 0.671) |
| Workless HH | -0.556*** | -0.488*** | 0.493*** | 1.129*** |
| | (-0.758 - -0.355) | (-0.698 - -0.277) | (0.312 - 0.674) | (0.891 - 1.368) |
| Ethnic origin* degree: | | | | |
| 2.coo#1.degree | -0.080 | 0.069 | -0.085 | -0.324 |
| | (-0.458 - 0.297) | (-0.356 - 0.494) | (-0.641 - 0.471) | (-1.190 - 0.542) |
| 3.coo#1.degree | -0.213 | 0.132 | 0.201 | 0.359 |
| | (-0.784 - 0.358) | (-0.454 - 0.718) | (-0.480 - 0.882) | (-0.428 - 1.146) |
| 4.coo#1.degree | -0.299 | 0.511 | 1.121** | -0.120 |
| | (-1.123 - 0.525) | (-0.310 - 1.331) | (0.211 - 2.031) | (-1.015 - 0.775) |
| 5.coo#1.degree | 0.576 | 0.679 | 0.241 | -0.043 |
| | (-0.393 - 1.545) | (-0.332 - 1.689) | (-0.802 - 1.284) | (-1.239 - 1.154) |
| 6.coo#1.degree | 0.714 | -0.129 | -0.385 | -0.439 |
| | (-0.292 - 1.719) | (-1.135 - 0.878) | (-1.502 - 0.731) | (-1.791 - 0.914) |
| 7.coo#1.degree | 0.222 | 0.248 | -0.552 | -0.113 |
| | (-0.307 - 0.752) | (-0.352 - 0.847) | (-1.310 - 0.207) | (-0.772 - 0.547) |
| Ethnic origin* social origin: | | | | |
| 2.coo#2.p_class | -0.138 | -0.148 | 0.318 | 0.188 |
| | (-0.581 - 0.305) | (-0.619 - 0.324) | (-0.165 - 0.801) | (-0.581 - 0.957) |
| 2.coo#3.p_class | 0.068 | -0.016 | 0.063 | -0.163 |
| | (-0.371 - 0.507) | (-0.461 - 0.428) | (-0.403 - 0.530) | (-0.823 - 0.497) |
| 2.coo#4.p_class | -0.016 | -0.225 | 0.680** | -1.099*** |
| | (-0.583 - 0.550) | (-0.854 - 0.404) | (0.127 - 1.233) | (-1.866 - -0.332) |
| 3.coo#2.p_class | 0.103 | 0.162 | -0.263 | 0.004 |

| | | | | |
|---|---|---|---|---|
| | (-0.707 - 0.914) | (-0.643 - 0.968) | (-1.169 - 0.643) | (-1.144 - 1.152) |
| 3.coo#3.p_class | 0.148 | 0.360 | -0.322 | -0.395 |
| | (-0.527 - 0.822) | (-0.306 - 1.025) | (-1.045 - 0.401) | (-1.306 - 0.515) |
| 3.coo#4.p_class | -0.024 | 0.711 | -0.327 | -0.699 |
| | (-0.899 - 0.852) | (-0.178 - 1.600) | (-1.265 - 0.611) | (-1.888 - 0.490) |
| 4.coo#2.p_class | -0.250 | 0.862 | -0.525 | -0.451 |
| | (-1.672 - 1.172) | (-0.190 - 1.914) | (-1.814 - 0.764) | (-1.606 - 0.703) |
| 4.coo#3.p_class | -0.050 | 1.028* | -0.664 | -0.661 |
| | (-1.347 - 1.247) | (-0.045 - 2.101) | (-1.927 - 0.599) | (-1.552 - 0.229) |
| 4.coo#4.p_class | 0.754 | -0.411 | -0.177 | -0.825* |
| | (-0.605 - 2.113) | (-1.555 - 0.733) | (-1.381 - 1.027) | (-1.717 - 0.066) |
| 5.coo#2.p_class | 0.121 | -1.302 | -0.291 | 2.054* |
| | (-1.486 - 1.729) | (-3.402 - 0.797) | (-2.097 - 1.515) | (-0.360 - 4.468) |
| 5.coo#3.p_class | -0.956 | 0.255 | -0.289 | 0.818 |
| | (-2.660 - 0.748) | (-1.723 - 2.234) | (-1.700 - 1.123) | (-1.497 - 3.132) |
| 5.coo#4.p_class | 0.187 | 0.451 | -0.215 | -0.363 |
| | (-1.306 - 1.681) | (-1.398 - 2.301) | (-1.702 - 1.272) | (-2.570 - 1.844) |
| 6.coo#2.p_class | 1.497* | -0.478 | -0.460 | -1.872* |
| | (-0.087 - 3.080) | (-2.115 - 1.159) | (-1.834 - 0.914) | (-4.024 - 0.281) |
| 6.coo#3.p_class | 1.764** | -1.332 | -0.460 | -0.817 |
| | (0.420 - 3.108) | (-2.923 - 0.260) | (-1.654 - 0.734) | (-2.428 - 0.793) |
| 6.coo#4.p_class | 0.713 | 0.172 | -1.060* | -0.726 |
| | (-0.431 - 1.857) | (-0.913 - 1.257) | (-2.186 - 0.067) | (-2.083 - 0.630) |
| 7.coo#2.p_class | 0.329 | -0.002 | -1.008** | 1.181** |
| | (-0.406 - 1.064) | (-0.916 - 0.913) | (-1.911 - -0.105) | (0.120 - 2.243) |
| 7.coo#3.p_class | 0.901** | 0.234 | -1.209*** | 0.057 |
| | (0.209 - 1.592) | (-0.437 - 0.905) | (-1.994 - -0.423) | (-0.888 - 1.002) |
| 7.coo#4.p_class | 0.488 | 0.015 | -1.104** | 0.344 |
| | (-0.357 - 1.333) | (-0.810 - 0.841) | (-1.978 - -0.230) | (-0.625 - 1.313) |
| Age | 0.189*** | 0.002 | -0.111*** | -0.102*** |
| | (0.161 - 0.217) | (-0.024 - 0.028) | (-0.135 - -0.087) | (-0.138 - -0.066) |
| Age squared | -0.002*** | 0.000 | 0.001*** | 0.001*** |
| | (-0.002 - -0.002) | (-0.000 - 0.000) | (0.001 - 0.002) | (0.000 - 0.001) |
| London | -0.048 | 0.055 | -0.229** | 0.601*** |
| | (-0.248 - 0.152) | (-0.149 - 0.258) | (-0.439 - -0.018) | (0.341 - 0.861) |
| Health | -0.205*** | -0.106*** | 0.157*** | 0.462*** |
| | (-0.248 - -0.163) | (-0.149 - -0.063) | (0.117 - 0.197) | (0.394 - 0.529) |
| Constant | -4.340*** | -0.781*** | 1.246*** | -1.617*** |
| | (-4.898 - -3.783) | (-1.293 - -0.270) | (0.764 - 1.727) | (-2.314 - -0.919) |
| N | | | | |

*** p<0.01, ** p<0.05, * p<0.1. Robust ci in parentheses.

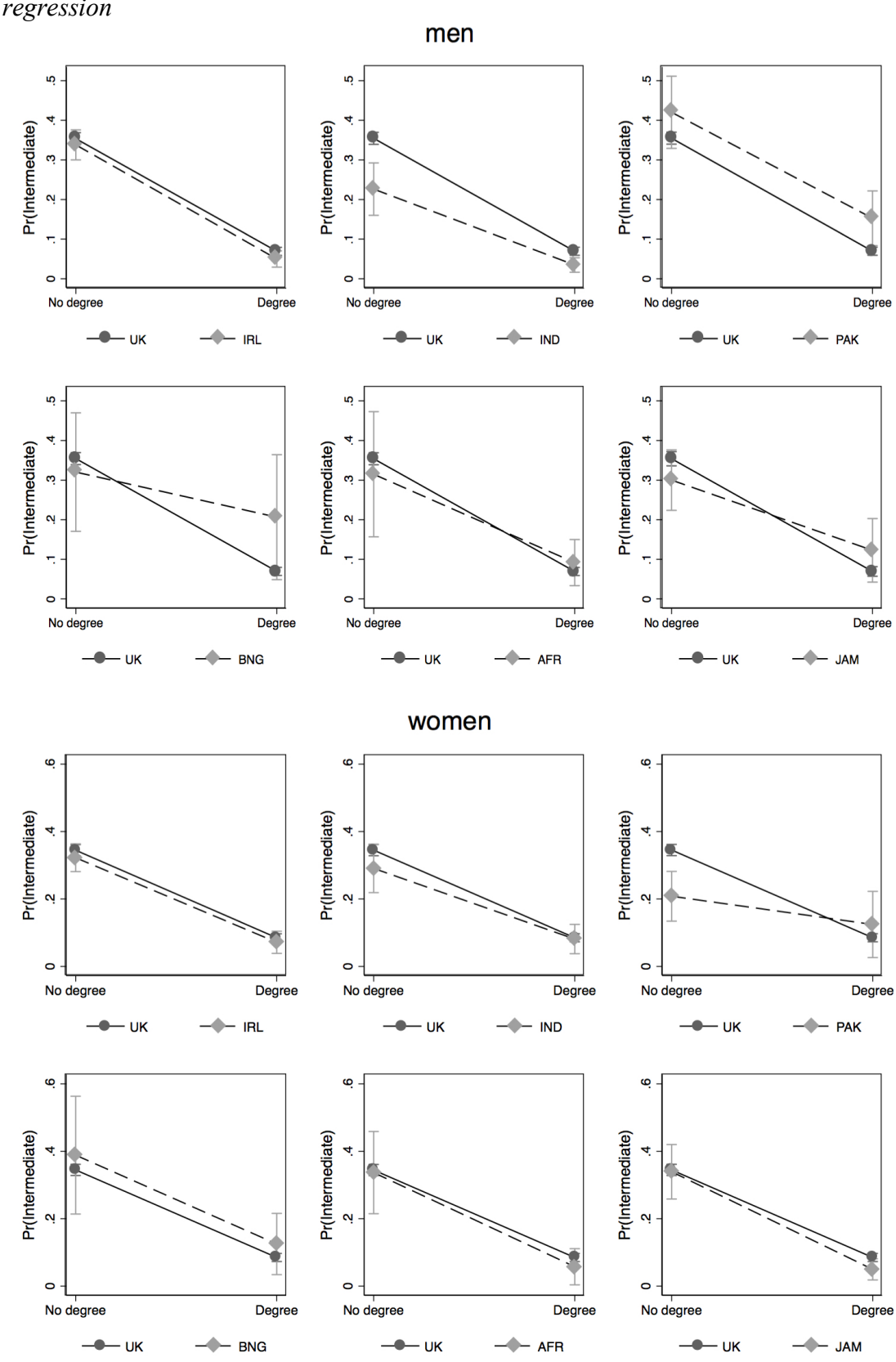
Source: *Understanding Society*, waves 1-4, author's analysis.

*Graph A5.1 Interaction effects between ethnic and social origins on the probability of attaining an intermediate position. Average adjusted probabilities after logistic regression*



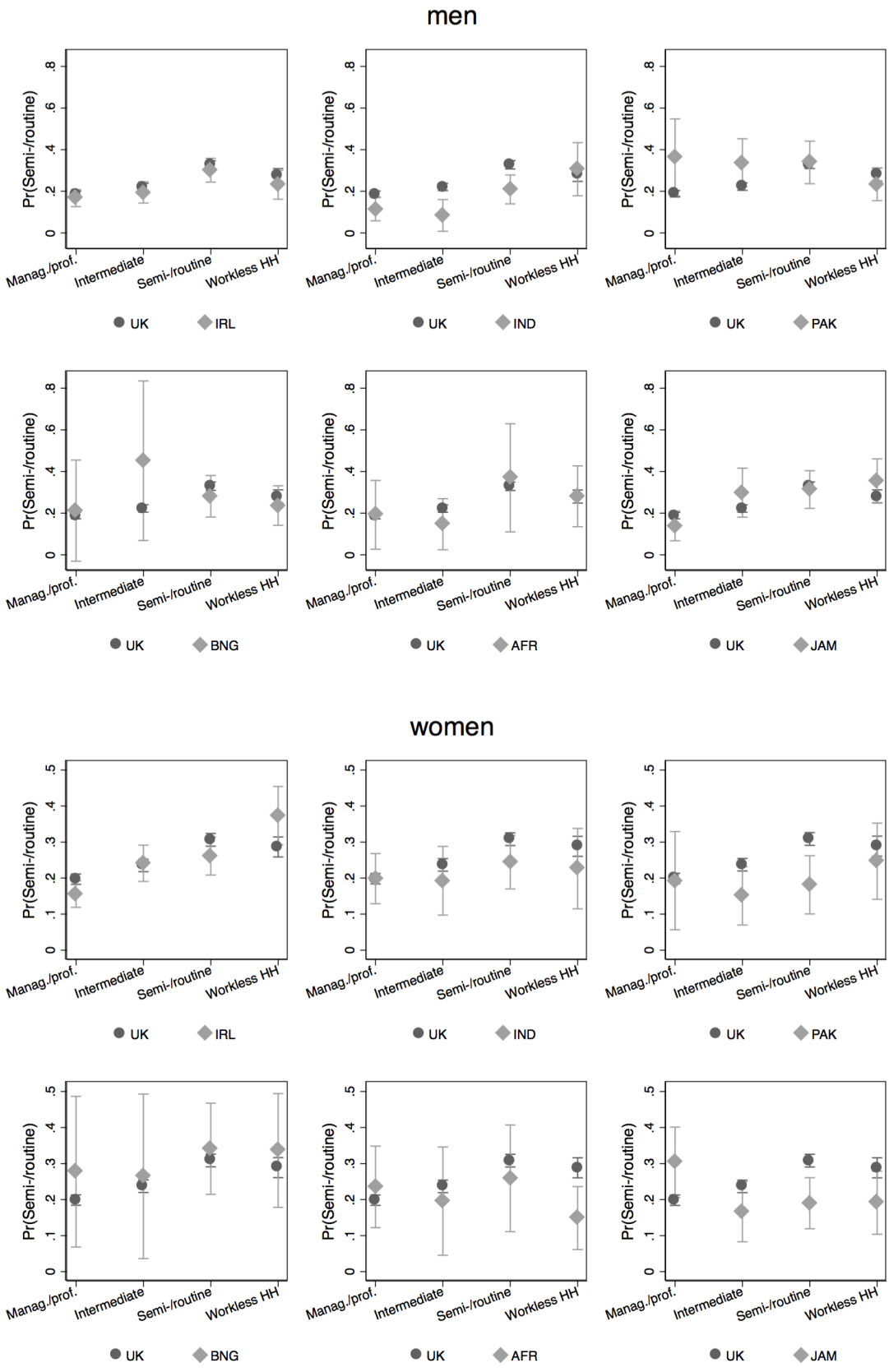

Source: *Understanding Society*, waves 1-4, author's analysis.

*Graph A5.2 Interaction effects between ethnic origin and degree on the probability of attaining an intermediate position. Average adjusted probabilities after logistic regression*



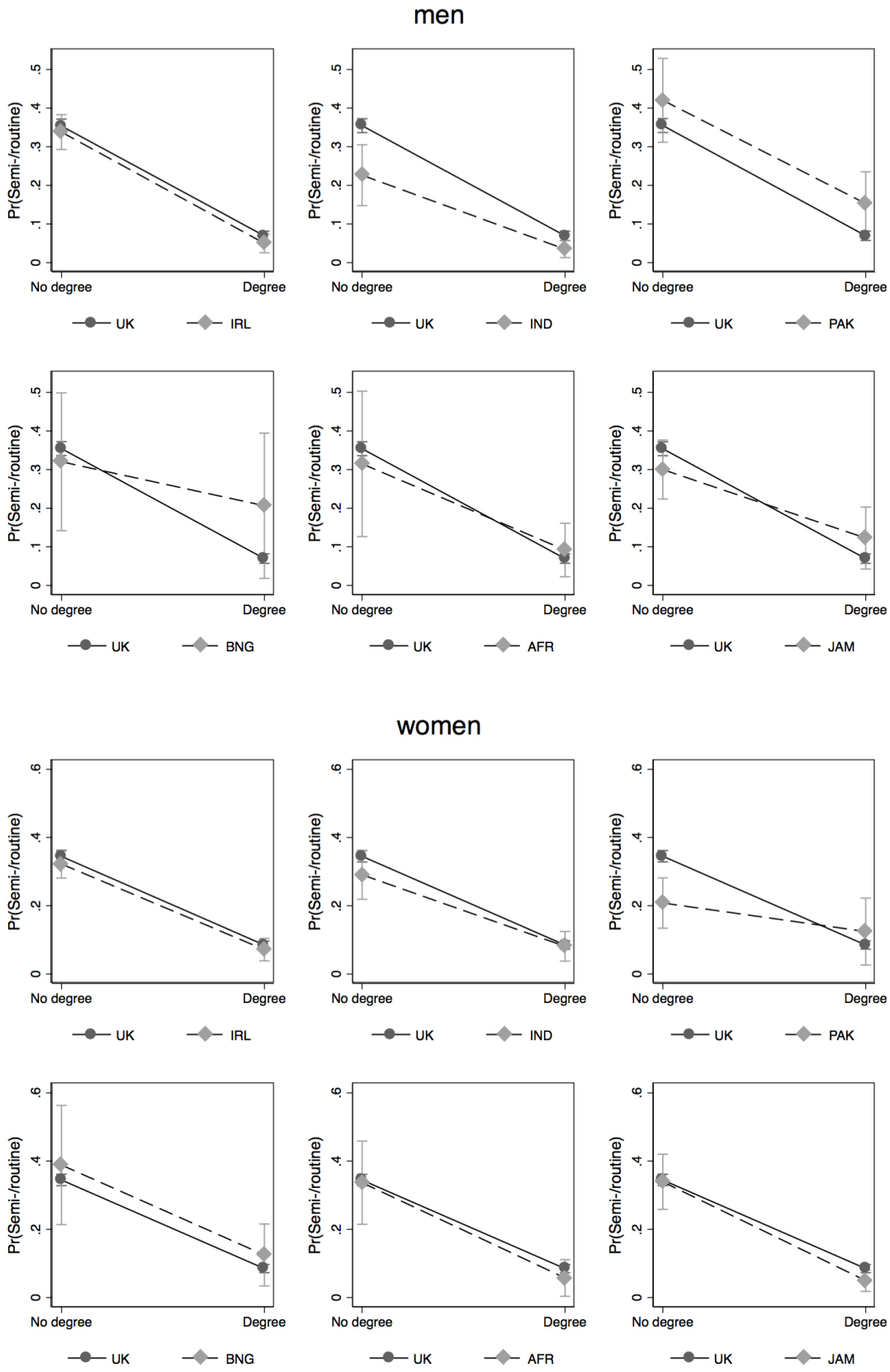

Source: *Understanding Society*, waves 1-4, author's analysis.

*Graph A5.3 Interaction effects between ethnic and social origins on the probability of attaining a semi-/routine position. Average adjusted probabilities after logistic regression*




Source: *Understanding Society*, waves 1-4, author's analysis.

*Graph A5.4 Interaction effects between ethnic origin and degree on the probability of attaining a semi-/routine position. Average adjusted probabilities after logistic regression*




Source: *Understanding Society*, waves 1-4, author's analysis.

# CHAPTER 6. CONCLUSION

In this thesis I have defended the idea that to understand immigrant and ethnic penalties/premiums in the labour market we cannot neglect the role of social origin. As Zuccotti (2014) points out, most of the research on migration has assumed both an equal social origin distribution, and a similar behaviour of the mechanisms of intergenerational transmission across ethnic-origin groups. This approach has been however recently challenged with the advent of some studies claiming the necessity of bringing together social stratification and migration theories. Building on the findings of these studies, I have sought to contribute to this alternative paradigm, of which we can also find examples in classical studies such as, among other, those of the North American sociologist William Julius Wilson (1980, 1987). To this aim, *Understanding Society* data have allowed me to define migration status and ethnic and social origins in a flexible way; and provided enough observations for each main ethnic minority group to test for between-group variation, but also to account for social class stratification within groups.

The thesis has aimed to put forward, in three autonomous but interrelated empirical chapters, a broad picture of the labour market experience of first, and especially second, generation immigrants in the UK belonging to the country's main ethnic minority groups. I have based my analytical strategy on two general postulates: different processes operate, and gendered patterns of experience apply, at different parts of the labour market. On this basis, I have studied ethnic origin differences in intergenerational social mobility more generally (chapter 3); and in labour-force participation (chapter 4), employment, and occupational attainment (chapter 5) in particular.

To explain variation in these three outcomes, I have focused on the explanatory role of the labour market experience of the parental generation when the respondent was growing up. More concretely, for labour-force participation I have tested the effects of the mother and mother-in-law's work statuses; and for employment and attainment those of parental work and occupational statuses respectively. The analytical strategy and findings in these three chapters contribute significantly to the migration literature as they provide new evidence on the role different social origin indicators play in explaining ethnic origin differences in labour-market outcomes. Moreover, they also contribute to the discussion of how the mechanisms explaining the origin-destination (OD) association work, and how these might differ by migration status and ethnic origin.

## 6.1 Main findings and implications

*Chapter 3. Social mobility*

In the first empirical chapter I have tackled the broad question of whether class overrides ethnicity in explaining intergenerational mobility differences between second generation immigrants and natives, or vice versa. Based on the results obtained, the main overall conclusion, in line with benchmark studies such as those of Li and Heath (2016) and Platt (2005), is that processes of intergenerational mobility operate in a similar way for the second generation and natives. However, the strength (not the pattern) of the OD association differs by gender and ethnic origin.

More specifically, in the first chapter I have reached four main conclusions. First, as expected, I have observed a convergent trend between the class distributions of the second generation and natives with respect to the marked differences at origin. Thus, disadvantaged groups in the parental generation such as Pakistanis and Bangladeshis, with more room at the top, improve significantly their class position in absolute terms in the second generation; while more advantaged groups at origin (e.g. Africans) reduce instead their initial advantage over natives in absolute terms. Nevertheless, despite convergence, significant group differences persist in the second generation.

Second, in relative terms, fit statistics for UNIDIFF models have confirmed for both men and women a common OD association across second generation immigrants and natives, with differences in its strength by ethnic origin. Regarding the latter, results have shown that, overall, inequality of opportunity is higher for natives than for the second generation. Higher social fluidity is however not necessarily a favourable thing in a non-meritocratic context such as the British one. Thus, in the case of more positively selected groups in terms of class at origin —such as African—, higher levels of social fluidity for the offspring imply lower levels of class reproduction at the top end of the distribution. This process is what Li and Heath (2016) label as perverse openness, and it is characterised by the obstacles of parents in transmitting their class advantage to the offspring in comparison to other similarly advantaged native parents in a non-meritocratic context.

Third, I have found significant differences by gender in the level of social fluidity. As an interesting finding, I have highlighted the fact that while on average native women present less social rigidity than men, for second generation women the opposite is true. This gender gap in fluidity is especially true for Jamaican and African women, who compared to their male

counterparts would be less affected by perverse openness. Differences between second generation immigrant and native women are, across all groups, smaller compared to those among men. Moreover, while in the case of men all groups present less social rigidity than native, Indian and African women (two highly selected groups) rely more on social origin than their native counterparts.

Fourth, by looking at the relationship between absolute and relative mobility I have defined four possible scenarios: high UMR[100]/high fluidity, low UMR/low fluidity, high UMR/low fluidity, low UMR/high fluidity. Results have shown that while for instance Bangladeshi and Pakistani men combine high upward mobility with high fluidity, African combine low upward mobility with high rigidity (although still below that of native men). In the case of women, I have observed less variation in absolute and more in relative mobility across groups, with Bangladeshi being the most and African the least mobile in relative terms. Indians are the only group that combines relatively high UMR with above average values of rigidity.

*Chapter 4. Labour force participation*

In the second empirical chapter I have sought to understand immigrant and ethnic origin differences in labour force participation, which I have described as the first barrier to labour market attainment. I have argued the study of labour force participation is key to understand selection into the labour market, and therefore must come before employment and occupational attainment. As far as I am aware, apart from the work of Khoudja and Fleischmann (2015b, 2015a) and Khoudja and Platt (2016), little has been done on immigrant and ethnic origin differences in participation, especially including the second generation and from a social origin perspective. In this sense, I have drawn upon the work of Fernández et al. (2002, 2004), among others, on the mother and the mother-in-law's transmission of preferences towards labour-force participation to their daughters and daughters-in-law. The findings in this second empirical chapter contribute to this literature. On one hand, by testing specific mechanisms (i.e. partner's GRA and involvement in housework) in the transmission of housewifery; and on the other, by expanding it from the perspective of migration research.

As it is well-known in labour market research, results have shown that non-participation (conceptualised as a 'decision') is a gendered process affecting almost exclusively women. In

[100] Upward Mobility Rate.

terms of differences in participation between immigrant (and the offspring) and native women, results have shown that participation gaps reduce significantly in the second generation, especially among women from groups with comparatively low participation levels in the first generation such as Indian, Pakistani, and Bangladeshi. Nevertheless, significant differences with respect to native women persist in the second generation, being this especially true for Pakistani.

To explain differences in female labour force participation I have used in the first part of the chapter the work status of the mother when the respondent was growing up as a key predictor. I have found it to be positively associated with participating in the labour force in adulthood; and this association to be mostly mediated by respondents' years of education, gender role attitudes (GRA), and family-related decisions. Accounting for compositional differences in the work status of the mother when growing up has reduced observed ethnic-origin penalties in participation significantly with respect to natives. Moreover, by specifying the interactions with both migration status and ethnic origin, I have also noted that while first generation immigrant women benefit more than native from having a working mother in terms of participation, the working mother effect on participation does not vary significantly across ethnic origin categories.

In the second part of the chapter I have constrained the sample to married and partnered women, and I have hypothesized that the work status of the mother-in-law when the partner/spouse was growing up is likely to affect women's labour force participation. Results have confirmed this hypothesis, and shown that are mostly the GRA of the partner/spouse, and not his contribution to housework, which mediate this association. However, GRA only mediate it partly. Results have also shown that the working mother-in-law effect on participation remains sizeable and statistically significant on top of the working mother effect. The latter instead, in line with the findings of Fernández et al. (2002, 2004), reduces its magnitude and becomes not statistically significant with the inclusion of the former.

With its interaction effect with ethnic origin, I have found that Pakistani and Bangladeshi women benefit substantively more than native from having a working mother-in-law. Thus, participation gaps are large between women from these two groups and native when the mother-in-law did not work, and negligible when she worked. These findings indicate that women from these two groups are more influenced by their partners/spouses' traditional characteristics than native in their decision to participate in the labour force. This stronger influence on FLFP in comparison to natives for these two groups could be explained by a higher average tolerance in the origin society towards more traditional attitudes regarding the labour

division of labour; which are reinforced in the host society by means of ethnic closure, fostered mostly by a high spatial concentration of co-ethnics (Zuccotti and Platt 2016). Although the direct origin society effect is likely to vanish in the second generation, ethnic spatial concentration favours the persistence of housewifery.

Moreover, as for the case of the working mother effect, first generation immigrant women benefit more from having a working mother-in-law than native in terms of participation. A plausible explanation would be that more traditional partners of first generation women are more likely to have a stronger effect on their participation as the disruptive nature of migration often affect women more negatively leaving them in a worst negotiating position within the couple (compared to their non-migrant counterparts). This process is not exclusive with the ethnic origin process described for Pakistani and Bangladeshi women.

*Chapter 5. Employment and occupational attainment*

After selection into the labour force, affecting mostly women, I have identified employment (conditional on participation) as a second barrier to labour market integration. Research on the UK often finds employment penalties for second generation immigrants even after controlling for education (Cheung and Heath 2007). A social origin explanation of this disadvantage is however rarely provided. Results have shown that indeed second generation immigrant men and women are more likely than natives to be unemployed. I have found that differences in employment in adulthood are partly explained by the work status of the household at origin. The effect is stronger when none of the parents worked —i.e. workless household—, and for men also when the father did not work. Moreover, I have found that while the effect of parental work status on employment is only mediated by education to a little extent, it is clearly moderated by it.

Results have shown that compositional differences in parental work status and age explain a great share of the employment penalties experienced by second generation immigrants across ethnic-origin groups. Moreover, interaction models have revealed that for African and Jamaican men, and Pakistani women, the effects of education and age are stronger than for natives; experiencing then the members of these groups the highest employment penalty at lower levels of education and younger ages. In the case of African and Jamaican men, this is partly explained by the lack of ethnic enclaves offering employment opportunities for the least educated. In the case of Pakistani women, a mixture of discrimination and more traditional gender attitudes might explain this greater employment disadvantage among the least educated.

On the other hand, I have concluded that the effect of parental work status behaves similarly across groups in predicting the probability of being employed.

Finally, in the second part of this chapter I have addressed differences in occupational attainment. Following the reasoning of Heath and McMahon (1999), I have argued in favour of a categorical approach to occupational attainment as different processes might apply between, but also within, different groups in the access to the salariat vs. semi-/routine occupations for instance.

Results have shown the strongest penalties in access to the salariat for African men and Pakistani men and women. Even if the penalties for these groups became not significant once parental class was accounted for, they widened with the inclusion of education indicating that for these two groups it brings lower returns. By modelling the interaction effect between social and ethnic origin, I have found difficulties for Pakistani and Bangladeshi men, and African men and women in preserving their class advantage with respect to natives from the same social origin. I have also found a weaker protective effect of upper social origins against unemployment for Pakistani men and women, and for African and Jamaican men.

Regarding the effect of education on occupational attainment (i.e. attaining a salariat position), I have observed a compensatory effect of having a degree in the probability of accessing the salariat for Bangladeshi and African men and women with respect to natives. Moreover, I have also observed a compensatory effect of having a degree in avoiding unemployment mainly for Jamaican men and Pakistani women.

In sum, the findings of this thesis corroborate the importance of social origin and education in explaining ethnic penalties at different levels of the labour market, i.e. from participation to attainment. Moreover, I have also confirmed migration and ethnic origin differences in the strength of the effect of social origin, education, and age on destination. Thus, while some groups benefit more than natives from having a degree in order to avoid unemployment or attain a position in the salariat; other benefit less for instance from coming from an upper social class position in order to reproduce this same social position.

### 6.2 Limitations and further research

The analyses in this thesis present some important limitations, which at the same time can be also thought as avenues for further research. The first of these limitations is the lack of information on the pre-migration characteristics of the first generation. As I have discussed, a common assumption is to consider social origin constructs to be equivalent across ethnic-origin

groups, ignoring the relative position of the person and his/her family in the country of origin (Feliciano and Lanuza 2017; Lenkeit, Caro, and Strand 2015). Since migration is a disruptive process, to have information on pre-migration characteristics is key for assessing whether the 'true' class position is reassessed in the second generation, and through which mechanisms — especially when there is downward mobility in the first generation.

Another limitation of this thesis is the broad definition of 'second generation' I use, as well as the genealogical understanding of it. Regarding the first point, to maximise the number of cases in each ethnic origin category I include, in line with other studies in the field, first generation immigrants arrived at an early age and third generation immigrants[101] in the second-generation category. Some authors such as Lessard-Phillips and Li (2017) find however that, at least for educational attainment, different outcomes are observed between more fine-grained migration status categories. In terms of the limitations of the genealogical approach, cohort differences within the second generation, and between second generation immigrants and natives, might negatively distort the interpretation of the findings. I argue that a better solution, usually difficult to apply in migration research, would be to select a birth or labour market entry cohort, and compare the experiences of second generation immigrants and natives.

The explanatory mechanisms connecting social origin indicators and destination outcomes need to be further developed. I also consider important to tackle the issue of whether they apply in the same way to respondents with a different migration status or ethnic origin as they do for natives. In the empirical chapters of this thesis I have mainly tested whether the effect of social origin on destination outcomes differs by migration status and ethnic origin, but I have not fully addressed the possibility that the importance and nature of the mechanisms driving the OD association differ across groups.

Another important limitation is the use of pooled data, often a choice in migration research due to the limited number of cases available, especially to conduct within group analyses. Pooled regression analyses do not make the best use of data as, among other aspects, they assume no correlation across individual observations (Bryan 2013). I however correct for this to the extent possible by adjusting the standard errors for repeated information across waves. Nevertheless, other uses of the data taking advantage of the panel structure of Understanding Society, especially now that a higher number of waves have been released and the immigrant sample refreshed, are the way forward. In this way, future research could study

[101] In this case mostly Irish and Jamaicans.

for instance the social origin effect (and its main explanatory mechanisms) on transitions and duration in different labour market outcomes, and the differences (if any) by ethnic origin.

Despite these limitations, I believe that the findings of this thesis make a valuable contribution particularly to the literature on migration/ethnicity, gender, social mobility, and the labour market. I also believe that the three empirical chapters broaden the scope of previous research on labour market immigrant and ethnic penalties and premiums. They provide innovative arguments (especially chapter 4) and supporting evidence on the relationship between social and ethnic origins, and its contribution to the understanding of labour market disadvantage and social mobility.

**BIBLIOGRAPHY**

Alba, Richard. 1988. 'Cohorts and the Dynamics of Ethnic Change'. Pp. 211–28 in *Social Structures and Human Lives*, edited by M. W. Riley. Newbury Park: Sage Publications.

Alba, Richard and Victor Nee. 1997. 'Rethinking Assimilation Theory for a New Era of Immigration'. *International Migration Review* 31:826–74.

Alwin, Duane F., Michael Braun, and Jacqueline Scott. 1992. 'The Separation of Work and the Family: Attitudes Towards Women's Labour-Force Participation in Germany, Great Britain, and the United States'. *European Sociological Review* 8(1):13–37.

Arcarons, Albert F. 2016. 'La Tasa de Actividad de Las Mujeres Inmigrantes en España y Reino Unido y Sus Determinantes'. Pp. 23–48 in *El nuevo escenario migratiorio en España*, *Panorama Social*. Madrid: FUNCAS.

Aspinall, Peter J. 2000. 'The Challenges of Measuring the Ethno-Cultural Diversity of Britain in the New Millennium'. *Policy & Politics* 28(1):109–18.

Aspinall, Peter J. 2009. 'The Future of Ethnicity Classifications'. *Journal of Ethnic and Migration Studies* 35:1417–35.

Balibar, Etienne. 2011. *Race, Nation, Class: Ambiguous Identities*. London: Verso.

Ballarino, Gabriele, Fabrizio Bernardi, Miguel Requena, and Hans Schadee. 2009. 'Persistent Inequalities? Expansion of Education and Class Inequality in Italy and Spain'. *European Sociological Review* 25(1):123–38.

Ballarino, Gabriele and Nazareno Panichella. 2013. 'The Occupational Integration of Male Migrants in Western European Countries: Assimilation or Persistent Disadvantage?' *International Migration* 53(2).

Becker, Birgit. 2010. 'The Transfer of Cultural Knowledge in the Early Childhood: Social and Ethnic Disparities and the Mediating Role of Familial Activities'. *European Sociological Review* 26(1):17–29.

Becker, Gary S. 1975. *Human Capital: A Theoretical and Empirical Analysis, with Special Reference to Education*. 2nd edition. Chicago: Chicago University Press.

Becker, Gary S. 1991. *A Treatise on the Family*. Enlarged edition. Cambridge, MA: Harvard University Press.

Beller, Emily. 2009. 'Bringing Intergenerational Social Mobility Research into the Twenty-First Century: Why Mothers Matter'. *American Sociological Review* 74(4):507–28.

Berg, Mette L. 2014. 'Generations'. in *Migration: The COMPAS Anthology*, edited by B. Anderson and M. Keith. Oxford: COMPAS.

Bernardi, Fabrizio. 1999. 'Does the Husband Matter? Married Women and Employment in Italy'. *European Sociological Review* 15(3):285–300.

Bernardi, Fabrizio. 2012. *Social Origins and Inequality in Educational Returns in the Labour Market in Spain*. EUI working paper, Florence: European University Institute.

Bernardi, Fabrizio and Gabriele Ballarino, eds. 2016. *Education, Occupation and Social Origin: A Comparative Analysis of the Transmission of Socio-Economic Inequalities*. Cheltenham, UK: Edward Elgar Publishing.

Bernasco, Wim, Paul M. De Graaf, and Wout C. Ultee. 1998. 'Coupled Careers: Effects of Spouse's Resources on Occupational Attainment in the Netherlands'. *European Sociological Review* 1:15–31.

Berthoud, Richard. 1998. 'Defining Ethnic Groups: Origin or Identity'. *Patterns of Prejudice*, 32(2): 53-63.

Berthoud, Richard. 2000. 'Ethnic Employment Penalties in Britain'. *Journal of Ethnic and Migration Studies* 26:389–416.

Berthoud, Richard, Laura Fumagalli, Peter Lynn, and Lucinda Platt. 2009. *Design of the Understanding Society Ethnic Minority Boost Sample*. Colchester, UK: Institute for Social and Economic Research.

Bisin, Alberto and Thierry Verdier. 2000. '"Beyond the Melting Pot": Cultural Transmission, Marriage, and the Evolution of Ethnic and Religious Traits'. *The Quarterly Journal of Economics* 115(3):955–88.

Black, Sandra E. and Paul J. Devereux. 2010. *Recent Developments in Intergenerational Mobility*. Cambridge, MA: National Bureau of Economic Research. Retrieved (http://www.nber.org/papers/w15889).

Blackaby, David H., D. G. Leslie, Phil D. Murphy, and Nigel C. O'Leary. 2002. 'White/Ethnic Minority Earnings and Employment Differentials in Britain: Evidence from the LFS'. *Oxford Economic Papers* 54(2):270–97.

Blanden, Jo, Alissa Goodman, Paul Gregg, and Stephen Machin. 2004. 'Changes in Intergenerational Mobility in Britain'. in *Generational Income Mobility in North America and Europe*, edited by M. Corak. Cambridge: Cambridge University Press.

Blanden, Jo, Paul Gregg, and Lindsey Macmillan. 2013. 'Intergenerational Persistence in Income and Social Class: The Effect of within-Group Inequality'. *Journal of the Royal Statistical Society: Series A (Statistics in Society)* 176(2):541–63.

Blau, Peter Michael and Otis Dudley Duncan. 1967. *The American Occupational Structure*. New York: Wiley.

Blinder, Scott. 2014. *Settlement in the UK*. COMPAS University of Oxford, UK.

Bloome, Deirdre and Bruce Western. 2011. 'Cohort Change and Racial Differences in Educational and Income Mobility'. *Social Forces* 90(2):375–95.

Blossfeld, Hans-Peter and Sonja Drobnič, eds. 2001. *Careers of Couples in Contemporary Societies: From Male Breadwinner to Dual Earner Families*. Oxford: Oxford University Press.

Blossfeld, Hans-Peter, Sonja Drobnič, and Rohwer Götz. 1998. 'Employment Patterns: A Crossroad between Class and Gender. A Long-Term Longitudinal Study of Spouses' Careers in West Germany'. *Revue Française de Sociologie* 39(2):305–52.

Blossfeld, Hans-Peter, Jan Skopek, Moris Triventi, and Sandra Buchholz. 2015. *Gender, Education and Employment: An International Comparison of School-to-Work Transitions*. Cheltenham, UK: Edward Elgar Publishing.

Borjas, George J. and Bernt Bratsberg. 1996. 'Who Leaves? The Outmigration of the Foreign-Born'. *The Review of Economics and Statistics* 78(1):165–76.

Boudon, Raymond. 1974. *Education, Opportunity and Social Inequality*. New York: Wiley.

Boudon, Raymond. 1998. 'Social Mechanisms Withour Black Boxes'. Pp. 172–203 in *Social Mechanisms. An Analytical Approach to Social Theory*, edited by P. Hedström and R. Swedberg. Cambridge, UK: Cambridge University Press.

Breen, R. and Jan O. Jonsson. 2007. 'Explaining Change in Social Fluidity: Educational Equalization and Educational Expansion in Twentieth-Century Sweden'. *American Journal of Sociology* 112(6):1775–1810.

Breen, R. and R. Luijkx. 2004. 'Social Mobility in Europe between 1970 and 2000'. Pp. 37–75 in *Social Mobility in Europe*, edited by R. Breen. Oxford: Oxford University Press.

Breen, Richard, ed. 2004a. *Social Mobility in Europe*. Oxford: Oxford University Press.

Breen, Richard. 2004b. 'Statistical Methods of Mobility Research'. Pp. 17–36 in *Social Mobility in Europe*, edited by R. Breen. Oxford University Press.

Breen, Richard and John H. Goldthorpe. 2001. 'Class, Mobility and Merit The Experience of Two British Birth Cohorts'. *European Sociological Review* 17(2):81–101.

Breen, Richard and Jan O. Jonsson. 2005. 'Inequality of Opportunity in Comparative Perspective: Recent Research on Educational Attainment and Social Mobility'. *Annual Review of Sociology* 31(1):223–43.

Breen, Richard and Jan O. Jonsson. 2007. 'Explaining Change in Social Fluidity: Educational Equalization and Educational Expansion in Twentieth-Century Sweden'. *American Journal of Sociology* 112(6):1775–1810.

Breen, Richard, Ruud Luijkx, Walter Müller, and Reinhard Pollak. 2009. 'Nonpersistent Inequality in Educational Attainment: Evidence from Eight European Countries'. *AJS; American Journal of Sociology* 114:1475–1521.

Breen, Richard, Carina Mood, and Jan Jonsson. 2016. 'How Much Scope for a Mobility Paradox? The Relationship between Social and Income Mobility in Sweden'. *Sociological Science* 3:39–60.

Brinbaum, Yaël and Sabina Issehnane. 2016. 'The Early Careers of the Second Generations: A Double Ethnic Penalty?' *Training and Employment* 119.

Brubaker, Rogers. 2006. *Ethnicity without Groups*. Cambridge, MA: Harvard University Press.

Brubaker, Rogers. 2015. *Grounds for Difference*. Cambridge, Massachusetts: Harvard University Press.

Bryan, Mark. 2013. *Panel Data Analysis of Microdata*. Colchester: University of Essex.

Bukodi, Erzsébet, John H. Goldthorpe, Lorraine Waller, and Jouni Kuha. 2015. 'The Mobility Problem in Britain: New Findings from the Analysis of Birth Cohort Data'. *The British Journal of Sociology* 66(1):93–117.

Burchell, Brendan. 2011. 'A Temporal Comparison of the Effects of Unemployment and Job Insecurity on Wellbeing'. *Sociological Research Online* 16(1):9.

Burton, Jonathan, Alita Nandi, and Lucinda Platt. 2008. *Who Are the UK's Minority Ethnic Groups? Issues of Identification and Measurement in a Longitudinal Study*. Colchester, UK: Institute for Social and Economic Research.

Burton, Jonathan, Alita Nandi, and Lucinda Platt. 2010. 'Measuring Ethnicity: Challenges and Opportunities for Survey Research'. *Ethnic and Racial Studies* 33:1332–49.

Cangiano, Alessio. 2014. *The Impact of Migration on Population Growth*. COMPAS University of Oxford, UK.

Carmichael, F. and R. Woods. 2000. 'Ethnic Penalties in Unemployment and Occupational Attainment: Evidence for Britain'. *International Review of Applied Economics* 14(1):71–98.

Carter, Bob and Steve Fenton. 2009. 'Not Thinking Ethnicity: A Critique of the Ethnicity Paradigm in an Over-Ethnicised Sociology'. *Journal for the Theory of Social Behaviour* 40:1–18.

Castles, Stephen and Mark J. Miller. 1993. *The Age of Migration: International Population Movements in the Modern World*. New York: Guilford Press.

Cebolla-Boado, Héctor. 2007. *A Non-Ethnic Explanation of Immigrants Educational Disadvantage: The Case of Lower Secondary Education in France*. University of Oxford.

Cebolla-Boado, Héctor and Claudia Finotelli. 2015. 'Is There a North–South Divide in Integration Outcomes? A Comparison of the Integration Outcomes of Immigrants in Southern and Northern Europe'. *European Journal of Population* 31(1):77–102.

Cebolla-Boado, Héctor and Amparo González Ferrer. 2013. *Inmigración: ¿integración sin modelo?* Madrid: Alianza.

Cederberg, Maja. 2017. 'Social Class and International Migration: Female Migrants' Narratives of Social Mobility and Social Status'. *Migration Studies* (mnw026).

Chan, Tak Wing and Vikki Boliver. 2013. 'The Grandparents Effect in Social Mobility: Evidence from British Birth Cohort studies.(Author Abstract)'. *American Sociological Review* 78(4):662.

Cheng, Yuan and Anthony F. Heath. 1993. 'Ethnic Origins and Class Destinations'. *Oxford Review of Education* 19(2):151–65.

Cheung, Sin Yi. 2014. 'Ethno-Religious Minorities and Labour Market Integration: Generational Advancement or Decline?' *Ethnic and Racial Studies* 37(1):140–60.

Cheung, Sin Yi and Anthony Heath. 2007. 'Nice Work If You Can Get It: Ethnic Penalties in Great Britain'. Pp. 507–50 in *Unequal Chances. Ethnic Minorities in Western Labour Markets.*, edited by S. Y. Cheung and S. Y. Cheung. Oxford: Oxford University Press.

Chiswick, B. 1979. 'The Economic Progress of Immigrants: Some Apparently Universal Patterns'. in *Contemporary economic problems*, edited by W. Fellner. Washington DC: American Enterprise Institute.

Chiswick, Barry R., Yew Liang Lee, and Paul W. Miller. 2003. 'Patterns of Immigrant Occupational Attainment in a Longitudinal Survey'. *International Migration* 41(4):47–69.

Connolly, Paul. 2006. 'Summary Statistics, Educational Achievement Gaps and the Ecological Fallacy'. *Oxford Review of Education* 32(2):235–52.

Cox, Nicholas J. 1999. *DISSIM: Stata Module to Calculate Dissimilarity Index*. Chestnut Hill: Boston College. Retrieved (https://ideas.repec.org/c/boc/bocode/s365901.html).

Crompton, Rosemary, Michaela Brockmann, and Clare Lyonette. 2005. 'Attitudes, Women's Employment and the Domestic Division of Labour a Cross-National Analysis in Two Waves'. *Work, Employment & Society* 19(2):213–33.

Crompton, Rosemary and Fiona Harris. 1998. 'A Reply to Hakim'. *The British Journal of Sociology* 49(1):144–49.

Crul, Maurice and Hans Vermeulen. 2003. 'The Second Generation in Europe'. *The International Migration Review* 37(4):965–86.

Czaika, Mathias and Hein de Haas. 2013. *Determinants of Migration to the UK*. COMPAS University of Oxford, UK.

Dale, Angela. 2002. 'Social Exclusion of Pakistani and Bangladeshi Women'. *Sociological Research Online* 7(3). Retrieved 4 September 2016 (http://www.socresonline.org.uk/7/3/dale.html).

Dale, Angela, Joanne Lindley, and Shirley Dex. 2006. 'A Life-Course Perspective on Ethnic Differences in Women's Economic Activity in Britain'. *European Sociological Review* 22(3):323–37.

Dale, Angela, Joanne K. Lindley, Shirley Dex, and Anthony Rafferty. 2008. 'Ethnic Differences in Women's Labour-market activity'. Pp. 81–106 in *Women and Employment: Changing Lives and New Challenges*. Cheltenham: Edward Elgar Publishing Ltd.

Davis, Shannon N. and Theodore N. Greenstein. 2009. 'Gender Ideology: Components, Predictors, and Consequences'. *Annual Review of Sociology* 35(1):87–105.

Dean, Hartley and Lucinda Platt. 2016. *Social Advantage and Disadvantage*. Oxford: Oxford University Press.

Del Boca, Daniela, Marilena Locatelli, and Silvia Pasqua. 2000. 'Employment Decisions of Married Women: Evidence and Explanations'. *Labour* 14(1):35–52.

Devine, Fiona and Yaojun Li. 2013. 'The Changing Relationship between Origins, Education and Destinations in the 1990s and 2000s'. *British Journal of Sociology of Education* 34(5–06):766–91.

DiPrete, Thomas A. and Gregory M. Eirich. 2006. 'Cumulative Advantage as a Mechanism for Inequality: A Review of Theoretical and Empirical Developments'. *Annual Review of Sociology* 32(1):271–97.

Dollmann, Jörg, Konstanze Jacob, and Frank Kalter. 2014. *Examining the Diversity of Youth in Europe. A Classification of Generations and Ethnic Origins Using CILS4EU Data (Technical Report)*. Mannheim: Mannheim Center for European Social Research (MZES).

Duncan, B. and O. D. Duncan. 1968. 'Minorities and the Process of Stratification'. *American Sociological Review* 33(3):356–64.

Duncan, Otis D. 1968. 'Inheritance of Poverty or Inheritance of Race?' Pp. 85–110 in *On Understanding Poverty*, edited by D. Moynihan. Nueva York: Basic Books.

Dustmann, Christian. 2008. 'Return Migration, Investment in Children, and Intergenerational Mobility Comparing Sons of Foreign- and Native-Born Fathers'. *Journal of Human Resources* 43(2):299–324.

Dustmann, Christian, Tommaso Frattini, and Nikolaos Theodoropoulos. 2011. 'Ethnicity and Second Generation Immigrants'. in *The Labour Market in Winter: the State of Working Britain*, edited by P. Gregg and J. Wadsworth. Oxford: Oxford University Press.

Düvel, Frank. 2007. 'United Kingdom'. Pp. 347–59 in *European Immigration. A Sourcebook*, edited by A. Triandafyllidou and R. Gropas. Aldershot, UK: Ashgate Publishing Limited.

Erikson, Robert. 2016. 'The Intergenerational Transmission of Advantage: The Importance of Social Background, Cognitive Ability and Education for Attained Social Class, Social Status, and Earnings'.

Erikson, Robert and John H. Goldthorpe. 1992. *The Constant Flux: A Study of Class Mobility in Industrial Societies*. Oxford: Oxford University Press.

Erikson, Robert and John H. Goldthorpe. 2010. 'Has Social Mobility in Britain Decreased? Reconciling Divergent Findings on Income and Class Mobility'. *The British Journal of Sociology* 61(2):211–30.

Erikson, Robert, John H. Goldthorpe, and Lucienne Portocarero. 1979. 'Intergenerational Class Mobility in Three Western European Societies: England, France and Sweden'. *The British Journal of Sociology* 30(4):415–441.

Ermisch, John, Markus Jäntti, and Timothy M. Smeeding, eds. 2012. *From Parents to Children: The Intergenerational Transmission of Advantage*. New York: Russell Sage Foundation.

Eurostat. 2015. 'Migration Integration Statistics'. Retrieved (http://ec.europa.eu/eurostat/statistics-explained/index.php/Migrant_integration_statistics_-_overview#Education).

Evans, Geoffrey. 1992. 'Testing the Validity of the Goldthorpe Class Schema'. *European Sociological Review* 8(3):211–32.

Everitt, Brian S. 1992. *The Analysis of Contingency Tables, Second Edition*. CRC Press.

Farré, Lídia and Francis Vella. 2013. 'The Intergenerational Transmission of Gender Role Attitudes and Its Implications for Female Labour-force participation'. *Economica* 80(318):219–47.

Featherman, David L. and Robert M. Hauser. 1976. 'Changes in the Socioeconomic Stratification of the Races, 1962-73'. *American Journal of Sociology* 82(3):621–51.

Feliciano, Cynthia and Yader R. Lanuza. 2017. 'An Immigrant Paradox? Contextual Attainment and Intergenerational Educational Mobility'. *American Sociological Review* 82(1):211–41.

Fernández, Raquel. 2010. *Does Culture Matter?* Cambridge, MA: National Bureau of Economic Research. Retrieved 6 March 2017 (http://www.nber.org/papers/w16277).

Fernández, Raquel, Alessandra Fogli, and Claudia Olivetti. 2002. *Marrying Your Mom: Preference Transmission and Women's Labor and Education Choices*. Cambridge, MA: NBER.

Fernández, Raquel, Alessandra Fogli, and Claudia Olivetti. 2004. 'Mothers and Sons: Preference Formation and Female Labor Force Dynamics'. *The Quarterly Journal of Economics* 119(4):1249–99.

Fernández-Reino, Mariña. 2016. 'Immigrant Optimism or Anticipated Discrimination? Explaining the First Educational Transition of Ethnic Minorities in England'. *Research in Social Stratification and Mobility* 46: 141-156.

Fleischmann, Fenella and Jutta Höhne. 2013. 'Gender and Migration on the Labour Market: Additive or Interacting Disadvantages in Germany?' *Social Science Research* 42(5):1325–45.

Friedberg, Rachel M. 2000. 'You Can't Take It with You? Immigrant Assimilation and the Portability of Human Capital'. *Journal of Labor Economics* 18(2):221–51.

Fryer, David. 1992. 'Psychological or Material Deprivation. Why Does Unemployment Have Mental Health Consequences?' in *Understanding Unemployment: New Perspectives on Active Labour Market Policies*, edited by E. McLaughlin. London: Routledge.

Gambetta, Diego. 1987. *Were They Pushed or Did They Jump? : Individual Decision Mechanisms in Education*. Cambridge, UK: Cambridge University Press.

Gracia, Pablo, Lucía Vázquez-Quesada, and Herman G. Van de Werfhorst. 2015. 'Ethnic Penalties? The Role of Human Capital and Social Origins in Labour Market Outcomes of Second-Generation Moroccans and Turks in the Netherlands'. *Journal of Ethnic and Migration Studies*, 42 (1): 69-87.

Ganzeboom, Harry B. G., Paul M. De Graaf, and Donald J. Treiman. 1992. 'A Standard International Socio-Economic Index of Occupational Status'. *Social Science Research* 21(1):1–56.

Ganzeboom, Harry B. G. and Donald J. Treiman. 1996. 'Internationally Comparable Measures of Occupational Status for the 1988 International Standard Classification of Occupations'. *Social Science Research* 25(3):201–239.

Ganzeboom, Harry B. G. and Donald J. Treiman. 2003. 'Three Internationally Standardised Measures for Comparative Research on Occupational Status'. in *Advances in Cross National Comparison: A European Working Book for Demographic and Socio-economic Variables*, edited by J. H. P. Hoffmeyer-Zlotnik and C. Wolf. New York: Kluwer Academic/Plenum Publishers.

Goldthorpe, John. 2016. 'Decades of Educational Expansion and Reform Have Had Little Effect on Social Mobility'.

Goldthorpe, John H. 1987. *Social Mobility and Class Structure in Modern Britain*. Oxford: Clarendon Press.

Goldthorpe, John H. 2000. *On Sociology: Numbers, Narratives, and the Integration of Research and Theory*. Oxford, UK: Oxford University Press.

Goldthorpe, John H. and Anthony F. Heath. 2016. *Social Class Mobility in Modern Britain: Changing Structure, Constant Process*. Oxford, UK: Centre for Social Investigation, Nuffield College, University of Oxford.

Goldthorpe, John H. and Michelle Jackson. 2007. 'Intergenerational Class Mobility in Contemporary Britain: Political Concerns and Empirical Findings'. *The British Journal of Sociology* 58(4):525–46.

Goldthorpe, John H. and Colin Mills. 2008. 'Trends in Intergenerational Class Mobility in Modern Britain: Evidence From National Surveys, 1972—2005'. *National Institute Economic Review* 205(1):83–100.

Goldthorpe, John and Colin Mills. 2004. 'Trends in Intergenerational Class Mobility in Britain in the Late Twentieth Century'. Pp. 195–224 in *Social Mobility in Europe*, edited by R. Breen. Oxford: Oxford University Press.

González-Ferrer, Amparo. 2006. 'Who Do Immigrants Marry? Partner Choice Among Single Immigrants in Germany'. *European Sociological Review* 22(2):171–85.

Goodman, Leo A. 1991. 'Measures, Models, and Graphical Displays in the Analysis of Cross-Classified Data'. *Journal of the American Statistical Association* 86(416):1085–1111.

Gopal, Deepthi, Yaron Matras, Laura Percival, Alex Robertson, and Marie Wright. 2013. *Multilingual Manchester: A Digest*. Manchester: Multilingual Manchester, School of Arts, Languages and Cultures, University of Manchester.

Guetto, Raffaele, Ruud Luijkx, and Stefani Scherer. 2015. 'Religiosity, Gender Attitudes and Women's Labour Market Participation and Fertility Decisions in Europe'. *Acta Sociologica* 58(2):155–72.

Guinea-Martin, Daniel, Ricardo Mora, and Javier Ruiz-Castillo. 2015. 'The Joint Effect of Ethnicity and Gender on Occupational Segregation. An Approach Based on the Mutual Information Index'. *Social Science Research* 49:167–78.

Guveli, Ayse et al. 2016. '2,000 Families: Identifying the Research Potential of an Origins-of-Migration Study'. *Ethnic and Racial Studies* 0(0):1–19.

Hakim, Catherine. 1998. 'Developing a Sociology for the Twenty-First Century: Preference Theory'. *The British Journal of Sociology* 49(1):137–43.

Hakim, Catherine. 2002. 'Lifestyle Preferences as Determinants of Women's Differentiated Labor Market Careers'. *Work and Occupations* 29(4):428–59.

Hakim, Catherine. 2003. *Models of the Family in Modern Societies: Ideals and Realities*. Aldershot, UK: Ashgate.

Heath, Anthony and Neli Demireva. 2014. 'Has Multiculturalism Failed in Britain?' *Ethnic and Racial Studies* 37(1):161–80.

Heath, Anthony F. and Sin Yi Cheung. 1998. 'Education and Occupation in Britain'. in *From School to Work. A Comparative Study of Educational Qualifications and Occupational Destinations*, edited by Y. Shavit and W. Müller. Oxford: Clarendon Press.

Heath, Anthony F. and Sin Yi Cheung, eds. 2007. *Unequal Chances : Ethnic Minorities in Western Labour Markets*. Oxford: Oxford University Press.

Heath, Anthony F. and Yaojun Li. 2008. 'Period, Life-Cycle and Generational Effects on Ethnic Minority Success in the Labour Market'. *Kölner Zeitschrift Für Soziologie Und Sozialpsychologie (KZfSS)* 48(10.2008):277–306.

Heath, Anthony F. and Yaojun Li. 2015. 'The Occupational Attainment Process: Minorities Compared with the British Majority Group'.

Heath, Anthony F. and Dorren McMahon. 1999. *Ethnic Differences in the Labour Market: The Role of Education and Social Class Origins*. Oxford: Centre for Research into Elections and Social Trends.

Heath, Anthony F. and Dorren McMahon. 2005. 'Social Mobility of Ethnic Minorities'. in *Social mobility and public policy: Comparing the US and the UK*, edited by G. C. Loury, T. Modood, and S. M. Teles. Cambridge: Cambridge University Press.

Heath, Anthony F. and Clive Payne. 2000. 'Social Mobility'. in *Twentieth Century British Social Trends*, edited by A. Halsey and J. Webb. Basingstoke: Macmillan.

Heath, Anthony F., Catherine Rothon, and Elina Kilpi. 2008. 'The Second Generation in Western Europe: Education, Unemployment, and Occupational Attainment'. *Annual Review of Sociology* 34:211–35.

Heath, Anthony and Jean Martin. 2013. 'Can Religious Affiliation Explain "ethnic" Inequalities in the Labour Market?' *Ethnic and Racial Studies* 36(6):1005–27.

Heath, Anthony and John Ridge. 1983. 'Social Mobility of Ethnic Minorities'. *Journal of Biosocial Science* 15(Supplement S8):169–184.

Heath, Anthony, Silke L. Schneider, and Sarah Butt. 2016. *Developing a Measure of Socio-Cultural Origins for the European Social Survey*. Cologne: Social Sciences Open Access Repository. Retrieved (http://nbn-resolving.de/urn:nbn:de:0168-ssoar-49503-6).

Heath, Anthony and Shawna Smith. 2003. 'Mobility and Ethnic Minorities'. *New Economy* 10(4):199–204.

Hendrickx, John. 2004. *ISKO: Stata Module to Recode 4 Digit ISCO-88 Occupational Codes*. Boston College Department of Economics. Retrieved (https://ideas.repec.org/c/boc/bocode/s425802.html).

Holland, Jennifer A. and Helga A. G. de Valk. 2014. *Differences in Labour-force participation by Motherhood Status among Turkish Second Generation and Majority Women across Europe*. The Hague: NIDI.

Holland, Paul W. 2008. 'Causation and Race'. in *White Logic, White Methods: Racism and Methodology. Racism and Methodology*, edited by T. Zuberi and E. Bonilla-Silva. Lanham: Rowman & Littlefield Publishers.

Hout, Michael. 1983. *Mobility Tables*. Beverly Hills: SAGE.

Hout, Michael. 1984a. 'Occupational Mobility of Black Men: 1962 to 1973'. *American Sociological Review* 49(3):308–22.

Hout, Michael. 1988. 'More Universalism, Less Structural Mobility: The American Occupational Structure in the 1980s'. *American Journal of Sociology* 93(6):1358–1400.

Hout, Michael. 2008. 'How Class Works: Objective and Subjective Aspects of Class Since the 1970s'. in *Social Class. How does it work?*, edited by A. Lareau and D. Conley. New York: Russell Sage Foundation.

Hout, Michael. 2015. 'A Summary of What We Know about Social Mobility'. *The ANNALS of the American Academy of Political and Social Science* 657(1):27–36.

Hout, Michael and Thomas A. DiPrete. 2006. 'What We Have Learned: RC28's Contributions to Knowledge about Social Stratification'. *Research in Social Stratification and Mobility* 24(1):1–20.

Huddleston, Thomas, Jan Niessen, Ni Chaoimh Eadaoin, and Emilie White. 2011. *Migrant Integration Policy Index III*. Brussels: British Council and Migration Policy Group.

Ichou, Mathieu. 2014. 'Who They Were There: Immigrants' Educational Selectivity and Their Children's Educational Attainment'. *European Sociological Review* jcu071.

Idema, Hanna and Karen Phalet. 2007. 'Transmission of Gender-Role Values in Turkish-German Migrant Families: The Role of Gender, Intergenerational and Intercultural Relations'. *Zeitschrift Für Familienforschung - Journal of Family Research* 19(1).

Iganski, Paul and Geoff Payne. 1996. 'Declining Racial Disadvantage in the British Labour Market'. *Ethnic and Racial Studies* 19(1):113–34.

Iganski, Paul and Geoff Payne. 1999. 'Socio-Economic Re-Structuring and Employment: The Case of Minority Ethnic groups1'. *The British Journal of Sociology* 50(2):195–215.

Iganski, Paul, Geoff Payne, and Judy Roberts. 2001. 'Inclusion or Exclusion? Reflections on the Evidence of Declining Racial Disadvantage in the British Labour Market'. *The International Journal of Sociology and Social Policy* 21(4–6):184–211.

Jackson, Michelle. 2006. 'Personality Traits and Occupational Attainment'. *European Sociological Review* 22(2):187–99.

Jackson, Michelle, John H. Goldthorpe, and Colin Mills. 2005. 'Education, Employers and Class Mobility'. *Research in Social Stratification and Mobility* 23:3–33.

Kalter, Frank and Irena Kogan. 2002. *Ethnic Inequalities at Labour Market Entry in Belgium and Spain*. Mannheim: Mannheimer Zentrum für Europäische Sozialforschung.

Kan, Man Yee. 2008. 'Does Gender Trump Money? Housework Hours of Husbands and Wives in Britain'. *Work, Employment & Society* 22(1):45–66.

Kan, Man Yee and Heather Laurie. 2016. *Gender, Ethnicity and Household Labour in Married and Cohabiting Couples in the UK*. Colchester, University of Essex: Institute for Social and Economic Research. Retrieved (http://econpapers.repec.org/paper/eseiserwp/2016-01.htm).

Kan, Man Yee, Oriel Sullivan, and Jonathan Gershuny. 2011. 'Gender Convergence in Domestic Work: Discerning the Effects of Interactional and Institutional Barriers from Large-Scale Data'. *Sociology* 45(2):234–51.

Kane, Emily W. 2000. 'Racial and Ethnic Variations in Gender-Related Attitudes'. *Annual Review of Sociology* 26(1):419–39.

Kapadia, Dharmi, James Y. Nazroo, and Ken Clark. 2015. 'Ethnic Identity and Inequalities in Britain: The Dynamics of Diveristy'. in *Have ethnic inequalities in the labour market persisted?*, edited by S. Jivraj and L. Simpson. London: Polity Press.

Kertzer, D. I. 1983. 'Generation as a Sociological Problem'. *Annual Review of Sociology* 9(1):125–49.

Khoudja, Yassine and Fenella Fleischmann. 2015a. 'Ethnic Differences in Female Labour-force participation in the Netherlands: Adding Gender Role Attitudes and Religiosity to the Explanation'. *European Sociological Review* 31(1):91–102.

Khoudja, Yassine and Fenella Fleischmann. 2015b. 'Labor Force Participation of Immigrant Women in the Netherlands: Do Traditional Partners Hold Them Back?' *International Migration Review* 50(1):1–36.

Khoudja, Yassine and Lucinda Platt. 2016. *Labour Market Entries and Exits of Women from Different Origin Countries in the UK*. London: Centre for Research and Analysis of Migration (CReAM).

Knies, Gundi. 2016. *Understanding Society: Understanding Society - UK Household Longitudinal Study: Wave 1 - 6, 2009-2015, User Manual*. Colchester: University of Essex.

Kogan, Irena. 2016. 'Integration Policies and Immigrants' Labor Market Outcomes in Europe'. *Sociological Science* 3:335–58.

Kulu, Hill and Amparo González-Ferrer. 2014. 'Family Dynamics Among Immigrants and Their Descendants in Europe: Current Research and Opportunities'. *European Journal of Population* 30(4):411–35.

Lambert, Paul, Kenneth Prandy, and Wendy Bottero. 2007. 'By Slow Degrees: Two Centuries of Social Reproduction and Mobility in Britain'. *Sociological Research Online* 12(1).

Lanzieri, Giampaolo. 2012. *Merging Populations. A Look at Marriages with Foreign-Born Persons in European Countries*. Luxembourg: EUROSTAT.

Lee, Jennifer, and Min Zhou. 2017. 'Why Class Matters Less for Asian-American academic achievement'. Journal of Ethnic and Migration Studies 43(14):2316-2330.

Lenkeit, Jenny, Daniel H. Caro, and Steve Strand. 2015. 'Tackling the Remaining Attainment Gap between Students with and without Immigrant Background: An Investigation into the Equivalence of SES Constructs'. *Educational Research and Evaluation* 21(1):60–83.

Lessard-Phillips, Laurence and Yaojun Li. 2017. 'Social Stratification of Education by Ethnic-minority groups over Generations in the UK'. *Social Inclusion* 5(1):45–54.

Levels, Mark, Jaap Dronkers, and Gerbert Kraaykamp. 2008. 'Immigrant Children's Educational Achievement in Western Countries: Origin, Destination, and Community Effects on Mathematical Performance'. *American Sociological Review* 73(5):835–53.

Li, Y. and Anthony F. Heath. 2014. 'Hard Times: Minority Ethnic Unemployment in Britain and the USA (1972-2011)'. *In Clark, T. and Heath, A, Editor(s). Hard Times: The Social Effects of the Recession in Britain and America. London: London: Yale University Press; 2014. P. 48-67.*

Li, Yaojun. 2016. 'Against the Odds: A Study of 2nd Generation Ethnic Minorities' Education in the UK'.

Li, Yaojun and Fiona Devine. 2011. 'Is Social Mobility Really Declining? Intergenerational Class Mobility in Britain in the 1990s and the 2000s'. *Sociological Research Online* 16(3):4.

Li, Yaojun and Fiona Devine. 2014. 'Social Mobility in Britain, 1991-2011'. Pp. 79–81 in *Understanding Employer Engagement in Education: theories and evidence*, edited by L. Archer and A. Mann. London: Routledge.

Li, Yaojun and Anthony Heath. 2016. 'Class Matters: A Study of Minority and Majority Social Mobility in Britain, 1982–2011'. *American Journal of Sociology* 122(1):162–200.

Li, Yaojun and Anthony F. Heath. 2014. *The Upward and Downward Social Mobility of Men in Different Ethnic Groups in Britain.* Essex Univeristy, Colchester: Society Central.

Li, Yaojun and Anthony F. Heath. 2015. *The Social Mobility of Ethnic Minorities*. Oxford: Centre for Social Investigation, Nuffield College, University of Oxford.

Lin, Nan, J. C. Vaughn, and W. M. Ensel. 1981. 'Social Resources and Occupational Status Attainment'. *Social Forces* 59(4):1163–81.

Longhi, S. and A. Nandi. 2015. *A practical guide to using panel data.* London: Sage.

Lynn, Peter (2009) *Sample design for Understanding Society*, Understanding Society Working Paper 2009-01*,* No. 2009-01, Colchester: ISER, University of Essex.

Lynn, Peter, and Kaminska, Olena. 2010 *Weighting Strategy for Understanding Society (No. 2010-05).* ISER, University of Essex, Colchester.

Maliepaard, Mieke and Richard Alba. 2016. 'Cultural Integration in the Muslim Second Generation in the Netherlands: The Case of Gender Ideology'. *International Migration Review* 50(1):70–94.

Massey, Douglas S. 2007. *Categorically Unequal: The American Stratification System*. New York: Russell Sage Foundation.

Mastekaasa, Arne. 2011. 'Social Origins and Labour Market Success—Stability and Change over Norwegian Birth Cohorts 1950–1969'. *European Sociological Review* 27(1):1–15.

Mayer, Susan, Greg Duncan, and Ariel Kalil. 2004. *Like Mother, Like Daughter? SES and the Intergenerational Correlation of Traits, Behaviors and Attitudes*. Chicago: Harris School of Public Policy Studies. Retrieved (http://econpapers.repec.org/paper/harwpaper/0415.htm).

McFall, Stephanie L. (Ed.). 2016. *Understanding Society - UK Household Longitudinal Study: Wave 1-6, 2009-2015, User Manual.* Colchester: University of Essex.

McFall, Stephanie, Alita Nandi, and Lucinda Platt. 2016. *Understanding Society: UK Household Longitudinal Study: User Guide to Ethnicity and Immigration Research*. 3rd Edition. Colchester: Institute for Social and Economic Research

Miller, Robert L. 1998. 'Unemployment as a Mobility Status'. *Work, Employment & Society* 12(4):695–711.

Model, Suzanne. 1999. 'Ethnic Inequality in England: An Analysis Based on the 1991 Census'. *Ethnic and Racial Studies* 22(6):966–90.

Modood, Tariq. 2013. *Multiculturalism*. Second edition. Cambridge: Polity.

Moen, Phyllis, Mary Ann Erickson, and Donna Dempster-McClain. 1997. 'Their Mother's Daughters? The Intergenerational Transmission of Gender Attitudes in a World of Changing Roles'. *Journal of Marriage and Family* 59(2):281–93.

Mood, Carina. 2010. 'Logistic Regression: Why We Cannot Do What We Think We Can Do, and What We Can Do About It'. *European Sociological Review* 26:67–82.

Morrill, Melinda Sandler and Thayer Morrill. 2013. 'Intergenerational Links in Female Labor Force Participation'. *Labour Economics* 20(C):38–47.

Muñoz-Comet, Jacobo. 2016. 'Potential Work Experience as Protection against Unemployment: Does It Bring Equal Benefit to Immigrants and Native Workers?' *European Sociological Review* jcv137.

Muttarak, Raya. 2007. *Does Interethnic Union Promote Occupational Mobility of Ethnic Minorities in Britain*. Oxford: University of Oxford, Department of Sociology.

Muttarak, Raya and Anthony Heath. 2010. 'Who Intermarries in Britain? Explaining Ethnic Diversity in Intermarriage Patterns'. *The British Journal of Sociology* 61:275–305.

Nandi, Alita and Lucinda Platt. 2012. *Understanding Society: Findings 2012*. Colchester: Institute for Social and Economic Research, University of Essex.

OECD. 2013. *International Migration Outlook 2013*. Paris: OECD Publishing.

OECD/European Union. 2015. *Indicators of Immigrant Integration 2015: Settling In*. Paris: OECD Publishing.

ONS. 2013. *Immigration Patterns of Non-UK Born Populations in England and Wales in 2011*. Office for National Statistics.

ONS. 2016. *Migration Statistics Quarterly Report, August 2016*. London: Office for National Statistics (ONS).

Papademetriou, Demetrios G., Will Somerville, and Madeleine Sumption. 2010. *The Social Mobility of Immigrants and Their Children*. Washington: Migration Policy Institute.

Paterson, Lindsay and Cristina Iannelli. 2007. 'Patterns of Absolute and Relative Social Mobility: A Comparative Study of England, Wales and Scotland'. *Sociological Research Online* 12(6). Retrieved (http://www.socresonline.org.uk/12/6/15.html).

Piore, Michael J. 1979. *Birds of Passage: Migrant Labor and Industrial Societies*. Cambridge, MA: Cambridge University Press.

Pisati, M. 2000. 'Uniform Layer Effect Models for the Analysis of Differences in Two-Way Associations'. *Stata Technical Bulletin* 55:33–47.

Platt, Lucinda. 2005a. *Migration and Social Mobility: The Life Chances of Britain's Minority Ethnic Communities*. Bristol: Policy Press.

Platt, Lucinda. 2005b. *Mobility and Missing Data: What Difference Does Non-Response Make to Observed Patterns of Intergenerational Class Mobility by Ethnic Group?* Colchester: University of Essex, Institute for Social and Economic Research.

Platt, Lucinda. 2005c. 'The Intergenerational Social Mobility of Minority Ethnic Groups'. *Sociology* 39:445–61.

Platt, Lucinda. 2006. 'Understanding Ethnic Group Differences in Britain: The Role of Family Background and Education in Shaping Social Class Outcomes'. Pp. 72–89 in *Going Places Neighbourhood, ethnicity and social mobility*, edited by Delorenzi, Simone. London: Institute for Public Policy Research.

Platt, Lucinda. 2007. 'Making Education Count: The Effects of Ethnicity and Qualifications on Intergenerational Social Class Mobility'. *The Sociological Review* 55(3):485–508.

Platt, Lucinda. 2011. *Inequality within Ethnic Groups*. York, UK: Joseph Rowntree Foundation.

Platt, Lucinda. 2012. 'How Do Children of Mixed Partnerships Fare in the United Kingdom? Understanding the Implications for Children of Parental Ethnic Homogamy and Heterogamy'. *The ANNALS of the American Academy of Political and Social Science* 643(1):239–66.

Platt, Lucinda. 2016. 'Class, Capitals, and Social Mobility'. in *Social advantage and disadvantage*, edited by H. Dean and L. Platt. Oxford: Oxford University Press.

Platt, Lucinda and Coretta Phillips. 2016. 'Race and Ethnicity'. in *Social Advantage and Disadvantage*, edited by H. Dean and L. Platt. Oxford: Oxford University Press.

Platt, Lucinda and Javier Polavieja. 2016. 'Saying and Doing Gender: Intergenerational Transmission of Attitudes towards the Sexual Division of Labour'. *European Sociological Review* jcw037.

Platt, Lucinda and Paul Thompson. 2006. 'Researching the Role of Family Background in the Social Mobility of Migrant Ethnic Minorities'. Pp. 191–217 in *Assessing Social Capital: Concept, Policy and Practice*, edited by R. Edwards, J. Franklin, and J. Holland. Newcastle, UK: Cambridge Scholars Publishing. Retrieved (http://www.c-s-p.org/).

Polavieja, Javier G. 2015. 'Capturing Culture A New Method to Estimate Exogenous Cultural Effects Using Migrant Populations'. *American Sociological Review* 80(1):166–91.

Portes, Alejandro and Lingxin Hao. 2004. 'The Schooling of Children of Immigrants: Contextual Effects on the Educational Attainment of the Second Generation'. *Proceedings of the National Academy of Sciences of the United States of America* 101(33):11920–27.

Portes, Alejandro and Min Zhou. 1993. 'The New Second Generation: Segmented Assimilation and Its Variants'. *The ANNALS of the American Academy of Political and Social Science* 530:74–96.

Powers, Daniel A. and Yu Xie. 2000. *Statistical Methods for Categorical Data Analysis*. San Diego ; London: Academic.

Putnam, Robert D. 2000. *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.

Raftery, A. 1988. *Approximate Bayes Factors for Generalized Linear Models*. Seattle: Department of Statistics, University of Washington.

Reyneri, Emilio and Giovanna Fullin. 2011. 'Labour Market Penalties of New Immigrants in New and Old Receiving West European Countries'. *International Migration* 49:31–57.

Rienzo, Cinzia. 2015. *Migrants in the UK Labour Market: An Overview*. Oxford: COMPAS, University of Oxford.

Rienzo, Cinzia. 2016. *Characteristics and Outcomes of Migrants in the UK Labour Market*. Oxford: COMPAS, University of Oxford.

Röder, Antje. 2014. 'Explaining Religious Differences in Immigrants' Gender Role Attitudes: The Changing Impact of Origin Country and Individual Religiosity'. *Ethnic and Racial Studies* 37(14):2615–35.

Rose, D. and E. Harrison. 2007. 'The European Socio-Economic Classification: A New Social Class Schema for European Research'. *European Societies* 9(3):459–90.

Rose, David and Eric Harrison, eds. 2010. *Social Class in Europe: An Introduction to the European Socio-Economic Classification*. London ; New York: Routledge.

Rose, David and D. Prevalin, eds. 2003. *A Researcher's Guide to the National Statistics Socio-Economic Classification*. London: Sage.

Schoon, I. et al. 2012. *Intergenerational Transmission of Worklessness: Evidence from the Millennium Cohort Study and the Longitudinal Study of Young People in England.* London: Department for education.

Sen, Maya and Omar Wasow. 2016. 'Race as a "Bundle of Sticks": Designs That Estimate Effects of Seemingly Immutable Characteristics'. *Annual Review of Political Science* 19.

Smeeding, Timothy M., Robert Erikson, and Markus Jäntii. 2011. *Persistence, Privilege, and Parenting: The Comparative Study of Intergenerational Mobility*. New York: Russell Sage Foundation.

Spencer, Ian R. G. 1997. *British Immigration Policy since 1939 : The Making of Multi-Racial Britain*. London: Routledge.

Stevens, Gillian and Monica Boyd. 1980. 'The Importance of Mother: Labor Force Participation and Intergenerational Mobility of Women'. *Social Forces* 59:186.

Strand, Steve. 2014. 'Ethnicity, Gender, Social Class and Achievement Gaps at Age 16: Intersectionality and 'Getting It' for the White Working Class'. *Research Papers in Education* 29 (2): 131-171.

Sunak, Rishi and Saratha Rajeswaran. 2014. *A Portrait of Modern Britain*. London: Policy Exchange.

Taniguchi, Hiromi and Rachel A. Rosenfeld. 2002. 'Women's Employment Exit and Reentry: Differences among Whites, Blacks, and Hispanics'. *Social Science Research* 31(3):432–71.

Torche, Florencia. 2011. 'Is a College Degree Still the Great Equalizer? Intergenerational Mobility across Levels of Schooling in the United States1'. *American Journal of Sociology* 117(3):763–807.

Torche, Florencia. 2013. *How Do We Characteristically Measure and Analyze Intergenerational Mobility?* Stanford, Calif: The Stanford Center on Poverty and Inequality. Retrieved (http://web.stanford.edu/group/scspi/_media/working_papers/torche_how-do- we-measure.pdf).

University of Essex. Institute for Social and Economic Research and National Centre for Social Research, Understanding Society: Wave 1-4, 2009-2013 [computer file]. 6th Edition. Colchester, Essex: UK Data Service [distributor], December 2014. SN: 6614, http://dx.doi.org/10.5255/UKDA-SN-6614-6.

Vandecasteele, Leen. 2016. 'Social Origin, Education and Socio-Economic Inequalities: Trends in the United Kingdom'. Pp. 215–36 in *Education, Occupation and Social Origin. A Comparative Analysis of the Transmission of Socio-Economic Inequalities*. Cheltenham, UK: Edward Elgar Publishing Ltd.

Verbakel, Ellen and Paul M. de Graaf. 2009. 'Partner Effects on Labour Market Participation and Job Level: Opposing Mechanisms'. *Work, Employment & Society* 23(4):635–54.

Whelan, C., B. Nolan, G. Esping-Andersen, B. Maitre, and W. Sander. 2012. 'The Role of Social Institutions in Intergenerational Mobility'. Pp. 331–67 in *Persitence, Power and Privilege: The Comparative Study of Intergnerational Mobility*, edited by T. M. Smeeding, R. Erikson, and J. Markus. New York: Russell Sage Foundation.

Williams, Malcolm and Kerryn Husk. 2013. 'Can We, Should We, Measure Ethnicity?' *International Journal of Social Research Methodology* 16:285–300.

Williams, Richard. 2012. 'Using the Margins Command to Estimate and Interpret Adjusted Predictions and Marginal Effects'. *The Stata Journal* 12(2):308–31.

Wilson, Deborah, Simon Burgess, Adam Briggs. 2011. 'The Dynamics of School Attainment of England's Ethnic Minorities'. *Journal of Population Economics* 24: 681-700.

Wilson, William J. 1980. *The Declining Significance of Race: Blacks and Changing American Institutions*. 2d ed. Chicago: University of Chicago Press.

Wilson, William J. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago: University of Chicago Press.

Wilson, William J. 2011. 'The Declining Significance of Race: Revisited & Revised'. *Daedalus* 140(2):55–69.

Wimmer, Andreas. 2009. 'Herder's Heritage and the Boundary-Making Approach: Studying Ethnicity in Immigrant Societies'. *Sociological Theory* 27(3):244–70.

Xie, Y. 1992. 'The Log-Multiplicative Layer Effect Model for Comparing Mobility Tables'. *American Sociological Review* 57(3).

Yamaguchi, K. 1987. 'Models for Comparing Mobility Tables: Toward Parsimony and Substance'. *American Sociological Review* 52(4):482–94.

Yamaguchi, Kazuo. 2009. 'Black–white Differences in Social Mobility in the Past 30 Years: A Latent-Class Regression Analysis'. *Research in Social Stratification and Mobility* 27(2):65–78.

Zuccotti, Carolina V. 2014. 'Do Parents Matter? Revisiting Ethnic Penalties in Occupation among Second Generation Ethnic Minorities in England and Wales'. *Sociology*, 1-23.

Zuccotti, Carolina V. and Lucinda Platt. 2016. 'Does Neighbourhood Ethnic Concentration in Early Life Affect Subsequent Labour-market outcomes? A Study across Ethnic Groups in England and Wales'. *Population, Space and Place*.

Zuccotti, Carolina V. 2015. 'Shaping Ethnic Inequalities: The Production and Reproduction of Social and Spatial Inequalities among Ethnic Minorities in England and Wales'. European University Institute, Florence.

Zwysen, Wouter. 2013. *Where You Go Depends on Where You Come from: The Influence of Father's Employment Status on Young Adult's Labour Market Experiences*. Colchester, University of Essex: Institute for Social and Economic Research.

Zwysen, Wouter. 2016. 'Does Having an Unemployed Father Affect Children's Work Prospects?' in *Insights 206. Findings from the largest longitudinal study of UK households*, edited by M. Benzeval, R. Kanabar, N. Martin, V. Nolan, and R. Patel. Colchester, University of Essex: Institute for Social and Economic Research (ISER).

Zwysen, Wouter and Simonetta Longhi. 2016. *Labour Market Disadvantage of Ethnic Minority British Graduates: University Choice, Parental Background or Neighbourhood?* Colchester, University of Essex: Institute for Social and Economic Research.