

A Service of

ZBW

Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre for Economics

Ham, Maarten Van; Findlay, Allan; Manley, David; Feijten, Peteke

Conference Paper Social mobility: Is there a benefit of being English in Scotland?

50th Congress of the European Regional Science Association: "Sustainable Regional Growth and Development in the Creative Knowledge Economy", 19-23 August 2010, Jönköping, Sweden

Provided in Cooperation with:

European Regional Science Association (ERSA)

Suggested Citation: Ham, Maarten Van; Findlay, Allan; Manley, David; Feijten, Peteke (2010) : Social mobility: Is there a benefit of being English in Scotland?, 50th Congress of the European Regional Science Association: "Sustainable Regional Growth and Development in the Creative Knowledge Economy", 19-23 August 2010, Jönköping, Sweden, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at: https://hdl.handle.net/10419/118873

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



WWW.ECONSTOR.EU

Social mobility: Is there an advantage in being English in Scotland?

Paper for the 50th Anniversary European Congress of the Regional Science Association International "Sustainable Regional Growth and Development in the Creative Knowledge Economy" 19 - 23 August 2010 - Jonkoping, Sweden

Maarten van Ham*¹, Allan Findlay², David Manley¹ and Peteke Feijten³

¹Centre for Housing Research, School of Geography and Geosciences, University of St Andrews, Irvine Building, North Street, St Andrews, KY16 9AL ²Centre for Applied Population Research, Geography, School of Social and Environmental Sciences, University of Dundee, Dundee DD1 4HN

³Longitudinal Studies Centre - Scotland, School of Geography and Geosciences, University of St Andrews, Irvine Building, North Street, St Andrews, KY16 9AL

* Corresponding Author: maarten.vanham@st-andrews.ac.uk

Abstract

This paper seeks to unpick the complex effects of migration, country of birth, and place of residence in Scotland on individual success in the labour market. We pay specific attention to the labour force experience of English-born residents in Scotland, whom the cross sectional literature suggests are more likely to achieve high occupational status than the Scottish born residents. Using data from the Scottish Longitudinal Study – linking individual records from the 1991 and 2001 Censuses – and logistic regressions we show that those living in, or moving to Edinburgh, and those born in England and Wales are the most likely to experience upward occupational mobility.

Key Words: Escalator Region, Social Class, Social Mobility, Longitudinal data, Scotland

JEL classifications: J24, J61, J62, R23

1. Introduction

It has been argued that Britain is moving towards a meritocracy, in which one would expect social advancement to result from an individual's talents and abilities, and not depend on social class, where you were born, or where you live. However, even although it has been argued that education has displaced social class as the main driver of upward social mobility (Marshall, 1997), in Britain social class continues to impact both on whether people participate in post-compulsory education and on the success of people in advancing their career once they enter the labour market (Nunn *et al.*, 2007). In addition, persistent regional differences in the opportunities for social mobility remain a worrying feature of modern life in the UK. These regional differences in equality of opportunity may be caused by economic and political circumstances and gain an extra poignancy when examined in the regional context of devolved government in Scotland. It is therefore essential that social scientists analyse the (spatial) patterning of social mobility (Breen, 2004).

We are specifically interested in two dimensions of social mobility. The first is a regional one. We seek to identify if there are regional variations in social mobility within Scotland. A number of powerful forces have produced potentially uneven opportunities for occupational advancement in Scotland. Edinburgh, as capital of a devolved nation, hub for financial service activities and regional head office location for many public sector bodies, seems to boast many of the characteristics that one would expect to find in a region offering good opportunities for rapid social and occupational mobility. One would certainly anticipate

that this would be true compared with the urban areas in Scotland traditionally associated with de-industrialisation and economic restructuring.

The second dimension of social mobility is related to country of birth. We will pay particular attention to the labour force experience of English and Welsh born residents living in Scotland, whom the cross sectional literature suggests are more likely to achieve high occupational status than their Scottish counterparts. It could be seen as problematic in a devolved nation if an external group were found to have disproportionate opportunities for upward social mobility compared with the local population, regardless of qualifications. Previous work has shown an ecological correlation between the residential locations of English-born persons in Scottish cities and membership of higher socio-economic groups (Findlay *et al.*, 2003). It is easy to argue that this is simply a selection effect associated with the determinants of longer distance mobility. We know that migrants are generally more successful than non-migrants and work by Champion (2004) on occupational and spatial mobility within England seems to support this claim. Research on Scots living in London and the South East of England has shown that longer-distance migrants have enjoyed more rapid upward mobility than the English population resident in the same region (Findlay et al., 2008). Detailed longitudinal analysis also showed that much of this effect could be explained by the higher educational achievements of the Scottish migrant population (Findlay et al., 2009).

This is the first systematic longitudinal study for Scotland that examines the effects of place of residence, place of birth, migration, and a range of independent socio-economic variables on upward (and downward) social mobility. We are especially interested in the differences in labour market experiences between English-born and Scottish born residents in Scotland. This is also one of the first papers to draw evidence from the recently constructed and very powerful Scottish Longitudinal Study (SLS) which links individual records from the 1991 and 2001 Scottish Censuses with a sample of 5.3% of the Scottish population (Boyle *et al.*, 2009). We study social mobility by comparing the socio-economic position – based on occupations – of SLS members in 1991 and 2001.

2. Literature Review

2.1. Relative social mobility

Occupational and social mobility can be discussed in absolute or relative terms. Absolute mobility occurs when an individual is better off than at some point in their past. Relative mobility by contrast relates to an individual's advancement relative to others in their society and cohort (sometimes thought of in terms of their changing position within a social hierarchy). Most social scientists believe that upward relative social mobility in a meritocracy should be more easily achieved than in a society divided along class lines. While many would suggest that modern western societies have shifted in favour of meritocratic standards and away from social structures determined dominantly along class lines (Marshall, 1997) there seems, however, to be little evidence of any increase in relative social mobility in the UK and other West European societies between the 1970s and the 1990s (Breen, 2004; Blanden et al., 2005; Nunn et al., 2007). Relative social mobility may even have fallen in UK for those in the lowest income groups, despite the expansion of education systems and the erosion of traditional class structures. However, there are others who are critical of the outcomes of these studies (see for instance Gorad, 2008). Work by Jantti and colleagues (2006) has shown that social mobility in Britain is similar to that experienced in the Nordic Countries with increasing opportunities for mobility between generations.

Education in a meritocracy is of course the main determinant of an individual's relative occupational and social mobility. However, social class can affect participation rates in post-compulsory education and middle-class parents continue to be very effective in ensuring that their children are well placed in relation to educational structures (Devine, 2004). As a result Nunn *et al.*, conclude (2007, p.3) that 'the introduction and expansion of

universal education systems in the UK and Western Europe have not led to increasing levels of relative mobility.'

Factors other than social class and education have also been found to influence relative social mobility. Perhaps the next most widely studied influence has been gender, with many studies confirming the differential in occupational status between men and women. Within the workforce men tend to enjoy a higher chance of entering high wage growth occupations and within these occupations to achieve more rapid occupational wage mobility than women (Dex *et al.*, 2008; Scott *et al.*, 2008). Conversely, factors that mitigate against women enjoying as rapid upward occupation trajectory as men include the greater likelihood of women taking a break from work to bring up children, or change residence in response to a career location by her husband, as well as other more fundamental labour market effects (van Ham & Büchel, 2006).

Ethnicity is another frequently cited reason for differentials in social mobility. In nearly all countries it appears that many recent immigrants experience downward social mobility after arrival in their host country (Bauer & Zimmermann, 1999) and even second generation immigrants may face a wage disadvantage depending on the ethnic group to which they belong (Borjas, 2006). Longer settled ethnic communities tend to face poorer occupational mobility than the local population, although as Robinson (1990) has shown there are huge differentials between ethnic communities. Platt (2005) has recently analysed the scale of occupational discrimination and other factors contributing to the social mobility differentials experienced by England's immigrant ethnic minorities. Platt found widespread evidence of ethnic differences in occupational status that do not map onto the educational attainment of these groups. Education, gender and ethnicity do not only affect social mobility, but also affect one's chances of retaining a high social position. Poor health, a low socioeconomic status and a lack of social and cultural capital have all been argued to be important in affecting downward mobility trajectories (Bourdieu, 1984) with Nunn et al (2007) suggesting that traditional working class social capital has weakened in the UK in recent decades in association with so-called cultures of worklessness.

2.2. Spatial and temporal dimensions of social mobility

Studies of relative social mobility underscore that social relations are being reproduced in a variety of ways that result in very uneven opportunities for upward mobility that diverge significantly from what might be expected in a meritocracy (Saunders, 2002). The debate on the subject has however largely ignored the spatial dimension of social and occupational mobility. This is perhaps surprising since economic history points to the widespread existence of significant mismatches between the spatial patterning of jobs and the distribution of labour seeking workers. A spatial mismatch of jobs and workers is an important explanation of mass migration of workers to locations of opportunity. This was not only true historically during the industrial revolutions, but it has also been true of more recent economic transformations.

For example, the economic specialisation that followed the re-organisation of national production systems, since the 1970s, to serve global markets (in what Massey [1984] described as the new international division of labour), led to the redistribution of jobs socially and the relocation of jobs geographically (Bloetvogel *et al.*, 1997; Lee, 2000). In most advanced economies this not only meant a greater concentration of jobs in the service sector, especially white collar, managerial and professional jobs, but it also produced increasingly uneven region distributions with concentrations in core economic regions of countries and at an international scale in global cities and city regions (Dunford & Fielding, 1997). These profound changes affected opportunities for absolute occupational mobility in western economies, but also produced conditions for new patterns of relative social mobility with traditional class structures becoming increasingly challenged. In most countries there is an increasingly uneven spatial pattern of job opportunities and opportunities for occupational mobility (van Ham, 2001).

Labour migration theory has traditionally focussed on how mobility provides a means by which spatial mismatches between the residential location of workers and the location of jobs can be overcome. Researchers have shown that labour migration, especially for the skilled and highly skilled, is often associated with upward occupational mobility (van Ham, 2001) with those with the best education and the most valued credentials being the most likely to move significant distances to obtain promotion, and also being rewarded more fully for this relocation (Mulder & van Ham, 2005). This apparently simple formulation remains vital in understanding why, even in a meritocratic society, some people will advance more rapidly than others in occupational terms, since it follows that those with credentials and a willingness to move will achieve occupational mobility more quickly than those who are either rooted in place or facing personal constraints on their mobility. Married couples with children and home owners provide obvious examples here (Helderman et al., 2006; van Ham & Hooimeijer, 2009; De Meester & van Ham, 2009).

2.3. Social mobility, global cities and regional economies

One concept that has received some attention but which remains under-developed in the context of studies of occupational mobility is that of the escalator region (Fielding, 1992; Dunford & Fielding, 1997). The concept draws clearly on the metaphor of an escalator as a means of moving both forward and upward, and when applied in a geographical context suggests that some regions not only provide more opportunities for occupational mobility, but that this will produce patterns of inter-regional migration towards these regions by those seeking more rapid advancement. Fielding (1992, 2004) argued that a higher density of job opportunities in an escalator region also made it possible for people living there to earn higher salaries and to gain occupational promotion more quickly than others. Champion (2004) found that many upwardly mobile people leave escalator regions at some point later in their career, returning to regional labour markets. A refinement worth noting is that empirical research shows there are many routes to upward mobility and that only a minority of migrants moving into the UK's main escalator region are rewarded by promotion at the time of their initial move and that most receive the reward for their move only after some time (Findlay, *et al.*, 2009).

There are two contexts within which the escalator concept holds particular promise. The first context involves research that specifically studies occupational mobility in global cities as opposed to within the heterogeneously diverse spatial container of the nation state. There has been remarkably little empirical testing of how unevenness in occupational mobility operates in global city regions, where very diverse ethnic groups are brought together in sometimes extremely polarised labour market conditions. These cities, on the one hand, involve elite mobility involving the social networks that make up the so-called transnational capitalist class (Sklair, 2001). On the other hand, people of diverse origins are drawn to work in the low-wage service economy of global cities often involving the downward mobility of well qualified people who are glad to accept wages that exceed those in countries of origin and involving youthful cohorts of mobile people seeking an entry point that allows them a temporary experience of living in the global city (Conradson & Latham, 2005; Favell, 2008).

The second context that remains understudied is the nature of occupational mobility in regional economies. In most so-called peripheral areas it is easy to identify specific cities that stand out as different from other towns and settlements because they function as regional command and control centres for the wider regional and sometimes global economy. There are at least five ways in which these cities have been shown to be distinctive in relation to the spatial and occupational mobility of their citizens (Findlay *et al.*, 2003). First they attract new service-class migrants (Webb, 1999) from the core of the economy whose moves are channelled within the 'network of flows' that sustain contemporary capitalism (Castells, 2000). Second, these cities have a disproportionately high share of mobile workers from the new service-class relative to the regional economy as a whole. Third, regional cities attract these workers not just from the core economic region of the national economy but also from

regional and international command and control centres in other countries. Fourth, these cities often exhibit a functional disconnection between the patterns of occupational mobility found amongst the local population employed in the service sector and the circuits of movement found amongst new service-class migrants from outside the region. The glass ceiling on upward mobility of some employees applies not only to long-established local people but as noted earlier, also to second generation members of visible ethnic minorities. Fifth, these regional centres require the mobility of skilled workers to be sustained for the wider regional economy to remain healthy. Thus, not only are they sites of inward and upward mobility, but they are also sites of upward and outward moves. The last feature is not surprising since it has been found that global cities also exhibit outward movement of upwardly mobile people and this involves not only onward moves to other global cities, but also some significant return migration of highly skilled people seeking to relocate to the regional control and command centres found in their region of origin (Findlay *et al.*, 2009).

2.4. From theoretical context to research questions

This literature review has provided ample evidence of the diversity of social and cultural factors that contribute to the continued unevenness of social mobility in western societies claiming to have moved away from class-based divisions. As has been argued, these social processes are deeply spatially embedded and produce social landscapes where opportunities for social mobility are not merely uneven, but are structured in such a way that they accentuate inequalities over time. Enchantingly this has been argued to be true not only in the core economic regions of contemporary world capitalism, notably in the regions of world cities, but also in regional centres where spaces of flows reproduce inequalities through the movement of workers in the new service class.

This paper sets out to examine two particular features. Firstly, we seek to identify if there is any evidence that individuals born outside Scotland are more likely to experience upward social mobility than the Scottish born population. Following the work of Castells (2000) it would be expected that flows of 'elite' service class workers fare better in this context than the local population. We would also expect to see the success of the 'elites' translated into a better ability to retain a higher social class than the local Scottish born population. Recognising that there is an important distinction to be made between visible and non-visible ethnicity we also consider the performance of 'other' ethnic groups: whilst the English and Welsh born migrants, and migrants born outside Great Britain, may be seen to be more successful than the Scottish majority population it is likely that members from other visible ethnic groups will not enjoy the same success in upward or maintained social mobility. Similarly, when a member of visible minority has achieved higher social status we expect to observe that they are less likely to maintain that status when compared to individuals that are not members of visible ethnic minorities.

Secondly we seek to see if there is any evidence that Edinburgh, the Scottish political capital, exhibits any evidence of becoming an escalator region within Scotland, as it assumes increased command and control functions both relative to the UK core economic region of the South East of England and relative to the rest of Scotland. If this were to be the case, one might expect to see evidence of the Edinburgh labour market offering opportunities for more rapid occupational mobility than other parts of Scotland. Similarly, an escalator region would be expected to assist with the maintenance of social position for individuals already in higher social classes in comparison with the other regions within Scotland.

3. Data and Methods

We use data from the Scottish Longitudinal Study (SLS), which contains linked 1991 and 2001 Census records for approximately 274,000 people, around 5.3% of the Scottish population (Boyle et al., 2009). The longitudinal nature of the data allows us to link 1991 individual and locational characteristics to 2001 outcomes. The research population included

all individuals present in Scotland who were employed in both 1991 and 2001. Individuals without a job in either 1991 or 2001 were omitted from the study, as were those who were younger than 15 or older than 55 in 1991.

The dependent variable in this study measures occupational mobility between 1991 and 2001 and is based on the National Statistics Socio-economic Classification (NS-SEC) which provides an indication of socio economic position based on occupation. The NS-SEC is constructed from the Standard Occupational Classification 2000 (SOC2000) and information on employee status (including managerial position) and size of organisation. NS-SEC is commonly used in the UK to identify social class status (Office for National Statistics, 2000a; 2000b). The NS-SEC classification has 8 broad categories: 1) higher managerial occupations and higher professional occupations; 2) lower professional and higher technical occupations; 3) intermediate occupations; 4) employers in small organisations and own account workers; 5) lower supervisory and technical occupations; 6) semi-routine occupations; 7) routine occupations; 8) never worked and long-term employed. We collapsed these categories into two categories: A) high occupational status consisting of NS-SEC categories 1 and 2; B) low occupational status consisting of NS-SEC categories 3, 5, 6, and 7. We excluded the self-employed in NS-SEC category 4 as this is a very heterogeneous group containing, for example, self-employed brick layers along with self- employed book editors or publishers. NS-SEC category 8 (the long-term unemployed and those who had never worked) were also excluded.

We constructed two dependent variables. The first dependent variable measures whether or not those in the low occupational status group (NS-SEC 3,5,6,7) in 1991 'moved up' to the high occupational status group (NS-SEC 1 or 2) in 2001. The outcome is coded into a dummy variable scoring 0 for those individuals who have remained in the low status group, and 1 identifying those who have moved into the high status group. The second dependent variable measures whether those in the high status group maintained their high social status. It is coded into a dummy variable with score 0 for those who experienced downward mobility into the low status group, and 1 for those who remained in the high status group. See Table 1 for summary statistics. Since the dependent variables are binary, we have used logistic regression models.

< Table 1 about here please >

The most important independent variable relates to an individual's country of birth. We classified individuals into 3 groups: Scottish born (reference group); born in England or Wales; born outside Great Britain. In this typology the Scottish born are the most populous. Based on Council Area boundaries combined with the Urban/Rural classification developed by the Scottish Government from the 1991 Census (Scottish Executive, 2004) we categorised 1991 and 2001 places of residence in five categories: Countryside (rural areas with population under 10,000 people and not in Council Areas defined as city or town areas); Towns (areas with a population between 10,000 and 100,000 people but not identified as being in a city or rural area); Other City (areas with a population of over 100,000 people but not Edinburgh or Glasgow); Edinburgh (the 1991 Council Area of Edinburgh); Glasgow (the 1991 Council Area of Glasgow). We show models with only 1991 place of residence and models with a combination of 1991 and 2001 place of residence (indicating stayers and movers between the 5 area types). The models with only 1991 place of residence will show a clear causal pathway where we relate 1991-2001 change in social class to the 1991 place of residence: any change in social class will have occurred after an individual choose the 1991 place of residence. The 'going up' models including a dynamics in place of residence variable, allow us to explore the idea that certain places in Scotland, notably Edinburgh, could act as escalator regions.

We included various control variables in our models which can be expected to be related to social mobility: gender; age; ethnicity; change in the presence of children between 1991 and 2001; change in household composition between 1991 and 2001; change in health

status between 1991 and 2001 based on long term limiting illnesses; 1991 post-compulsory (post-18) educational qualifications in three groups; 1991 housing tenure. Variable descriptions for all these variables can be found in Table 1.

4. Results

4.1. Spatially uneven social mobility

Table 2 shows the relationship between place of residence in 1991 and occupational mobility for those born in Scotland, born in England and Wales. Social mobility is defined as mobility between the low occupational status group and the high occupational status group, in either direction. We refer below to these groups as low status and high status. We were not able to include 2001 place of residence in the table as this would lead to low cell counts. Table 2 shows that, in general, those living in Edinburgh are the most likely to experience upward social mobility, and the least likely to experience downward social mobility. Of the three country of birth groups, those born in England and Wales are the most likely to experience upward social mobility, especially when they lived in Edinburgh in 1991. Those born in England and Wales are also the least likely to experience downward social mobility, again especially when they lived in Edinburgh in 1991. We can draw two preliminary conclusions from Table 2. Those living in Edinburgh have an advantage over those living in other places in Scotland and those born in England and Wales have an advantage over those born elsewhere. These two effects reinforce each other. In the next section we use multivariate models to control for the effects of other characteristics that are known to affect social mobility, especially gender, ethnicity and education.

<Table 2 about here please>

4.2. Transitions from low status to high status occupations

Table 3 presents the results from a series of logistic regression models estimating the probability of moving into the high status group for those in the low status group in 1991. The first model only includes country of birth dummies and the results are similar to those found in Table 2: individuals born in England and Wales, or born outside the Great Britain, are more likely to experience upward social mobility than those born in Scotland. In Model 2 we added 1991 place of residence. In line with what we expected, those individuals who lived in Edinburgh in 1991 are the most likely to experience upward social mobility between 1991 and 2001, followed by those who lived in Other Cities and Glasgow. Controlling for place of residence of model 1.

<Table 3 about here please>

Model 3 includes a range of individual and household level control variables. The largest coefficients in the model are associated with qualifications. Individuals with post-18 qualifications (either vocational or a degree) are substantially more likely to experience upward mobility than those without post-18 qualifications. This result could be interpreted as people experiencing upward mobility primarily in relation to their talents, although we would be the first to admit that social class remains a key influence on educational attainment. It is important to note that after including education and a wide range of other control variables explaining social mobility, the effect of country of birth still remains significant. This demonstrates that in comparison with the Scottish born, individuals born in England or Wales, or born outside Great Britain but living in Scotland in 1991 are more likely to experience upward social mobility. In terms of the initial hypotheses set out above, there is therefore some evidence that Scotland falls short of being entirely meritocratic. There appears to be an element of outsider advantage. However, caution is necessary as selection effects

might be (partly) responsible for our results. Those individuals born in England, Wales or outside Great Britain who have migrated to Scotland are likely to exhibit other characteristics associated with career progression that are not included in our data, such as greater ambition, or a greater willingness to take risks (Cote 1997).

After controlling for other variables, place of residence is also still a significant predictor of upward social mobility, with those living in Edinburgh being the most likely to experience upward mobility. This might indicate that Edinburgh functions as an escalator region in Scotland, which we will explore further in Model 4.

Females are (slightly) more likely to experience upward social mobility than males. This might seem surprising at first, but it is important to remember that our models include only females who were in employment in both 1991 and 2001 and these females are likely to be career orientated. As expected, increasing age reduces the probability of experiencing upward social mobility (van Ham and Büchel, 2006). Belonging to a visible ethnic minority has a large negative impact on the probability of upward social mobility (Robinson, 1990; Platt, 2005). This highlights that there are significant and substantial barriers for upward social mobility for individuals in visible ethnic minorities.

Those living in a household which gained children between 1991 and 2001 are less likely to experience social mobility than those in a household with children in both years or those in a continuously childless household. Changes in household status do not seem to influence social mobility. Poor health, defined as having a limiting long term illness, reduces the probability of experiencing upward social mobility compared to good health. However, individuals who had poor health in both 1991 and 2001 are not statistically different from those without poor health in both years. The most likely explanation is that those with continuously poor health, but with a job in both years, have adapted successful strategies promoting social mobility. The final individual level explanatory variable in model 3 is housing tenure. Social renters in 1991 are the least likely to experience upward social mobility between 1991 and 2001, followed by private renters. Home owners are the most likely to experience upward social mobility.

We further develop the idea of escalator regions in Model 4 by including a range of dummies representing individual-level spatial mobility between areas in Scotland between 1991 and 2001. The reference group consists of those individuals who lived in the Countryside in both 1991 and 2001. The results show that movers are generally more likely to experience upward social mobility than those who live in the same area in 1991 and 2001. This is consistent with the literature (Mulder and van Ham, 2005). The results further show that those who move to Edinburgh from other areas, and to a lesser extent those who move to Glasgow, are the most likely to experience upward social mobility. In line with the literature we can conclude that migration is an important instrument in upward social mobility. Our models also suggest that the cities of Glasgow and especially Edinburgh function as escalator regions within a Scottish context.

4.3. Retaining a high status occupation between 1991 and 2001.

Next we look at the factors that contribute to maintaining a high social status between 1991 and 2001. We modelled the probability that those who were in the high social status group in 1991 were also in the high status group in 2001. Model 5 in Table 4 shows that without any control variables added to the model, those born in England and Wales, and especially those born outside Great Britain are more likely to retain their high social class than those born in Scotland. In Model 6 we added 1991 place of residence. Individuals who lived in Glasgow and Edinburgh in 1991 are the most likely to stay in the high status group, while those in small towns are the least likely. Controlling for place of residence hardly affects the country of birth coefficients.

<Table 4 about here please>

Model 7 is the complete model of the determinants of maintaining social status. Many of the coefficients of the control variables are not significant. The gender variable shows that females are significantly less likely to keep their high social class status than males. With increasing age people are less likely to maintain their high status. There is no significant effect of belonging to a visible ethnic minority group, which indicates that members of this group are as likely to maintain their position as the rest of the population. So although substantial barriers exist for ethnic minorities in terms of achieving higher status, there is no evidence that for the select group that do achieve upward mobility there is further discrimination in terms of the maintenance of these positions. People with children in both years, or only in 1991, are slightly more likely to maintain a high status compared to those without children. Individuals with ill health in 2001 are less likely to hold their high social class status than the other health categories. As with gaining upward mobility, post 18 qualifications are very important in maintaining a high social class status, especially a higher degree. Finally, private renters, and especially social renters are less likely to hold on to their high social status than home owners.

In contrast with model 4, adding all these control variables to model 7 caused the country of birth coefficients to become insignificant. So the fact that individuals born in England or Wales, or outside Great Britain are more likely to maintain their position in the high status group than individuals born in Scotland is not apparently a function of their country of birth, but mainly reflects their higher levels of education. Although we found in model 4 that those born in England and Wales and outside the Great Britain are more likely to experience upward social mobility – even after controlling for education – model 7 suggests that once educational background is introduced, place of birth ceases to have explanatory power in understanding differences in people's ability of maintaining their higher status. Table 4 does not include a model with the full interaction effect between 1991 and 2001 place of residence as none of the effects were significant.

5. Conclusions

Using a powerful longitudinal dataset, the Scottish Longitudinal Study, this paper examined two important conceptual dimensions of social mobility: the influence of country of birth on social mobility, and regional inequalities of social mobility.

Through analysis we have established that workers born outside Scotland are more likely to achieve upward social mobility than their Scottish born counterparts. This builds on the ideas of Castells (2000). Within a regional labour market immigrant elites tend to perform better than locals, especially when living in escalator cities. The apparent advantage of those born outside Scotland relative to the Scottish born population might partly be attributed to selection effects. In general, migration is a highly selective process, undertaken by those individuals most likely to 'do better' in their career independent of their moving behaviour (Mulder & van Ham, 2005). It should be noted that the composition of the groups born outside Scotland (either in England or Wales or outside Great Britain) is very different to the composition of the Scottish born population. The Scottish born group is a sample drawn from the full population. The outside Scotland born groups are a sample of a specific set of people who have migrated over longer distances. It is notable that previous work (Findlay et al., 2009) has shown that similar effects exist in England for Scottish born. Thus, individuals who are willing to make longer distance moves in general are likely to possess other qualities that lead to successful performance in the labour market. The possibility of selection effects does not take away the fact that those born outside Scotland are more likely to experience social mobility. This creates at least a sense of inequality where outsiders seem to perform better than insiders.

The analyses provided clear evidence that Edinburgh, and to a lesser extent Glasgow, operate as escalator cities in Scotland. Individuals living in or moving to these places are more likely to experience upward occupational mobility than individuals living in other parts

of Scotland. Edinburgh in particular, as the capital of a devolved nation, and head office location for many financial services and regional public sector bodies, provides good opportunities for rapid social and occupational mobility.

It is important to realise that although there is evidence that individual upward mobility is more likely in the Edinburgh escalator region, individual educational achievement has been shown to be a more significant contributor to upward social mobility. This is important evidence that, educationally, the Scottish labour market is showing signs of functioning to some extent along meritocratic lines, but the fact that place of birth effects remain statistically significant even after the education of a mover has been taken into account is interesting. In addition it should be remembered that there remains a significant association between class and access to education, and especially post-18 education. The notion of meritocracy is easier to uphold from the empirical evidence that country of birth and place of residence are not significant drivers in the maintenance of high social class. The main driver for keeping position comes from successful participation in post-18 education.

This study makes two important contributions to the literature on social mobility. The first is that we showed that country of birth has a significant effect on social mobility even after controlling for education. This indicates that Scotland like the rest of the UK falls short of being a meritocracy and that despite devolution Scotland continues to offer uneven social mobility internally and relative to elite migrants from outside who belong to the managerial capitalist class (Sklair, 2001). The second is that this study is amongst the first to show that escalator effects (Fielding, 1997) are to be found outside major world city regions. We found that also on a regional level, there are clear spatial inequalities in the opportunities for social mobility.

Acknowledgement

The help provided by staff of the Longitudinal Studies Centre - Scotland (LSCS) is acknowledged. The LSCS is supported by the ESRC/JISC, the Scottish Funding Council, the Chief Scientist's Office and the Scottish Executive. The authors alone are responsible for the interpretation of the data. Census output is Crown copyright and is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland.

References

- Bauer, T. and Zimmermann, K. (1999) Occupational mobility of ethnic migrants *IZA Discussion Paper* 58 (Bonn: University of Bonn).
- Blanden, J. P., Gregg, P., Machin, S. (2005) *Intergenerational mobility in Europe and North America: Report for the Sutton Trust.* London: Centre for Economic Performance.
- Bloetvogel, H. and Fielding, A. (eds) (1997) *People, Jobs and Mobility in the New Europe.* Wiley: Chichester.
- Borjas, G. J. (2006) Making it in America Princeton : Princeton University Press.
- Bourdieu, P. (1984) Distinction. London: Routledge.
- Boyle, P. J. Feijten, P. Feng, Z. Hattersley, L. Huang, Z. Nolan J. and Raab, G. (2009) Cohort Profile: The Scottish Longitudinal Study (SLS), *International Journal of Epidemiology*, 38(2), 385-392.
- Breen, R. (ed) (2004) Social Mobility in Europe. Oxford: OUP.
- Castells, M. (2000) The Rise of Network Society, second edition. Oxford: Blackwell.
- Champion, T. (2004) Testing the return migration element of the "escalator region" model. Paper presented at the LS 2001 Census Launch Conference, London School of Hygiene and Tropical Medicine, 21 September 2004, online at www.celsius.lsthm.ac.uk /documents/Champion210904.pdf.

- Conradson, D. and Latham, A. (2005) Friendship, networks and transnationality in a world city *Journal of Ethnic and Migration Studies*, *31*(2), 287-305.
- Cote, G. (1997) Socio-economic attainment, regional disparities, and internal migration *European Sociological Review*, 13(1), 55-77.
- Devine, F. (2004) Class Practices in how Parents help their Children get Good Jobs Cambridge: Cambridge University Press.
- De Meester, E. and van Ham, M. (2009) Symmetry and asymmetry in working and commuting arrangements between partners in the Netherlands: does the residential context matter? *Environment and Planning A* 41, 2181-2200.
- Dex, S. Ward, K. and Joshi, H. (2008) Gender differences in occupational wage mobilities in the 1958 cohort, *Work, Employment and Society*, 22, 263-80.
- Dunford, M. and Fielding, A. (1997) Greater London, the South-East region and the wider Britain, in Blotevogel, H. and Fielding, A. (eds) *People, Jobs and Mobility in the New Europe: Metropolitan Polarisation, Uneven Development and Inter-Regional Migration*. Chichester: Wiley, 247-276.
- Favell, A. (2008) Eurostars and EuroCities. Oxford: Blackwell.
- Fielding, A. (1992) Migration and social mobility: South-East England as an escalator region, *Regional Studies*, *26*(1), 1-15.
- Fielding, A. (1997) The effects of economic restructuring on the populations of Western Europe's cities and regions, in Blotevogel, H. and Fielding, A. (eds) *People, Jobs and Mobility in the New Europe: Metropolitan Polarisation, Uneven Development and Inter-Regional Migration*. Chichester: Wiley, 287-304.
- Fielding, A. (2004) Class and space: social segregation in Japanese cities, *Transactions*. *Institute of British Geographers*, 29, 64-84.
- Findlay, A. M. Stockdale, A. Hoy, C. and Higgins, C. (2003) The structuring of service class migration. *Urban Studies*, 40, 2067-2081.
- Findlay, A.M., Mason, C., Harrison, R., Houston, D. and McCollum, D. (2008) Getting off the escalator? *Environment and Planning A*, 40, 2169-2185.
- Findlay, A. Mason, C. Houston, D. McCollum, D. and Harrison, R. (2009) Escalators, elevators and travelators: the occupational mobility of migrants to South-East England, *Journal of Ethnic and Migration Studies*, 35(6), 861-879.
- Gorad, S. (2008) A re-consideration of rates of 'social mobility' in Britain: or why research impact is not always a good thing. *British Journal of Sociology in Education*, 23(3) 317-324.
- Helderman, A., van Ham, M. and Mulder, C.H. (2006) Migration and homeownership. Journal of Economic and Social Geography 97(2), 107-121.
- Jantti, M., Bratsberg, B., Roed, K., Raaum, O., Naylor, R., Osterbacka, E., Bjorklund, A., and Erikson, T. (2006) American exceptionalism in a new light: A comparison of intergenerational earnings mobility in the Nordic countries, the United Kingdom and the United States, *IZA Discussion Paper* 1938. Bonn: Institute for the Study of Labor.
- Lee. R, (2000) Integration. In *The Dictionary of Human Geography*. Eds Johnston R J, D Gregory, G Pratt, M Watts, Blackwell, Oxford, 398-402.
- Marshall, G. (1997) Repositioning Class. London: Sage.
- Massey, D. (1984) Spatial Divisions of Labour Macmillan: Basingstoke.
- Mulder C.H. and van Ham M. (2005) Migration histories and occupational achievement. *Population, Space and Place* 11(3), 173-186.
- Nunn, A. Johnson, S. Monro, S. Bickerstaffe, T. (2007) Factors influencing social mobility Department of Work and Pensions, Research Report 450.
- Office for National Statistics (2000a) Standard occupational classification2000, vol. 1. Structure and description of unit groups. London: The Stationary Office.
- Office for National Statistics (2000b) Standard occupational classification 2000, vol. 2. The coding index. London: The Stationary Office.
- Platt, L. (2005) Migration and Social Mobility Bristol: Policy Press.
- Robinson, V. (1990) Roots to mobility Ethnic and Racial Studies, 13, 274-86.

- Saunders, P. (2002) Reflections on the meritocracy debate in Britain, *British J of Sociology*, 15, 559-574.
- Scott, J. Dex, S. and Joshi, H. (eds) (2008) *Changing Patterns of Women's Employment over* 25 years. Edwin Elgar: Cheltenham.
- Scottish Executive (2004) Scottish executive urban rural classification 2003-2004. Available online at: www.scotland.gov.uk [Accessed 1 May 2008].
- Sklair, L. (2001) The Transnational Capitalist Class. Oxford: Blackwell.
- van Ham, M. (2001) Workplace mobility and occupational achievement, *International Journal of Population Geography* 7, 295-306.
- van Ham, M. and Büchel, F. (2006) Unwilling or Unable? Spatial and socio-economic restrictions on females' labor market access. *Regional Studies* 40(3), 1-12.
- van Ham, M. and Hooimeijer, P. (2009) Regional differences in spatial flexibility: long commutes and job related migration intentions in the Netherlands. *Applied Spatial Analysis and Policy* 2, 129-146.
- Webb, J. (1999) Work and the new public service class? Sociology, 33, 747-66.

| Table 1: | Variable | Summary | Statistics. |
|----------|----------|---------|-------------|
|----------|----------|---------|-------------|

| | Low occupational status 1991, N= 36,330 | High occupational status 1991, N= 15,024 | | |
|---|--|---|--|--|
| Country of Birth | | 1771,11,10,021 | | |
| Scotland (reference) | 33,809 | 12,833 | | |
| England and Wales | 1,909 | 1,657 | | |
| Outside Great Britain | 612 | 534 | | |
| Place of Residence 1991 | | | | |
| Countryside (reference) | 11,043 | 3,983 | | |
| Town | 11,724 | 4,114 | | |
| Other City | 7,732 | 3,506 | | |
| Edinburgh | 2,688 | 1,969 | | |
| Glasgow | 3,143 | 1,452 | | |
| Female (reference = Male) | 18,041 | 6,884 | | |
| Age 1991 (average years) | 34.74 | 36.97 | | |
| Ethnic minority (ref not ethnic minority) | 126 | 90 | | |
| Change in presence of children | | | | |
| 1991/2001 No children (reference) | 8.754 | 5,032 | | |
| 1991 No Child/2001 Child | 5,890 | 2,527 | | |
| Children 1991/2001 | 13,027 | 4,016 | | |
| 1991 Child/ 2001 No Child | 8,659 | 3,450 | | |
| Change in Household | | | | |
| Couple 1991 and 2001 (reference) | 20,956 | 10,304 | | |
| Couple 1991, single 2001 | 3,213 | 850 | | |
| Single 1991 and 2001 | 5,722 | 1,921 | | |
| Single 1991, couple 2001 | 6,439 | 1,950 | | |
| Change in Health | | | | |
| Not ill 1991 and 2001 (reference) | 33,108 | 13,846 | | |
| Ill in 1991 and 2001 | 260 | 96 | | |
| Ill 1991 only | 630 | 218 | | |
| Ill 2001 only | 2,332 | 864 | | |
| Over 18 Qualifications 1991 | | | | |
| None (reference) | 34,276 | 6,021 | | |
| Vocational | 1,412 | 4,879 | | |
| Degree or higher | 642 | 4,124 | | |
| Tenure 1991 | | | | |
| Owner Occupation (reference) | 22,847 | 12,769 | | |
| Social Renting | 11,465 | 1,400 | | |
| Private Renting | 2,018 | 855 | | |

| Population born in Scotland | 2001 Occupational status group | | | | | | |
|--|--------------------------------|--------------------------------|--------|--|--|--|--|
| 1 | High (%) | Low (%) | N | | | | |
| Glasgow 🛱 High | 85.49 | 14.51 | 1,309 | | | | |
| $\frac{O}{E_0}$ Low | 24.63 | 75.37 | 3,017 | | | | |
| Edinburgh 🛒 High | 84.19 | 15.81 | 1,531 | | | | |
| te Low | 29.52 | 70.48 | 2,449 | | | | |
| GlasgowInterferenceHighEdinburghStateLowEdinburghStateHighLowLowCountrysideOther cityStateHighLowLowLowTownLowLowCountryside66High | 82.65 | 17.35 | 3,182 | | | | |
| St. Low | 24.38 | 75.62 | 7,387 | | | | |
| Town 👌 High | 81.39 | 18.61 | 3,708 | | | | |
| Low | 21.32 | 78.68 | 10,940 | | | | |
| Countryside 🖇 High | 82.14 | 17.86 | 3,751 | | | | |
| - Low | 20.81 | 79.19 | 10,072 | | | | |
| Population born in England | 2001 Occupation | onal status grou | up | | | | |
| and Wales | High (%) | Low (%) | Ν | | | | |
| GlasgowHigh LowEdinburghShi High LowEdinburghShi High LowOther cityHigh LowTownHigh LowTownHigh LowCountrysideHigh | 91.30 | 8.70 | 92 | | | | |
| En Low | 28.79 | 71.27 | 66 | | | | |
| Edinburgh 🛛 🕄 High | 91.84 | 8.16 | 331 | | | | |
| ta Low | 44.85 | 55.15 | 165 | | | | |
| Other city Solution High | 90.50 | 9.05 | 242 | | | | |
| d Low | 32.05 | 67.95 | 259 | | | | |
| Town 🛛 High | 77.69 | 22.04 | 313 | | | | |
| $\stackrel{\smile}{=}$ Low | 28.37 | 71.63 | 645 | | | | |
| Countryside 🕄 High | 86.13 | 13.87 | 714 | | | | |
| — Low | 28.16 | 71.84 | 831 | | | | |
| Population born outside GB | | 2001 Occupational status group | | | | | |
| | High (%) | Low (%) | N | | | | |
| Glasgow 🚊 High | 90.00 | 10.00 | 60 | | | | |
| En Low | 20.83 | 79.17 | 72 | | | | |
| Edinburgh 🛛 High | 92.37 | 7.63 | 118 | | | | |
| E Low | 26.51 | 73.49 | 83 | | | | |
| Other city High | 86.87 | 13.13 | 99 | | | | |
| fr Low | 23.97 | 76.03 | 121 | | | | |
| GlasgowdiHigh LowEdinburghsntgLowEdinburghsntgLowOther cityYHigh CountrysideTownOHigh LowCountryside66High | 90.83 | 9.17 | 109 | | | | |
| $\stackrel{\bigcirc}{=}$ Low | 24.87 | 75.13 | 197 | | | | |
| Countryside 🖇 High | 91.21 | 8.79 | 182 | | | | |
| - Low | 37.37 | 62.63 | 190 | | | | |

 Table 2: Mobility between high and low occupational status groups (1991 - 2001) by place of residence in 1991 and country of birth.

| occupational statu | is group i | n 1991 | | | | | | | | | | |
|---|---------------|------------|--------|--------------|----------|-----|-----------|-------|--------|----------|-------|-------|
| | Model 1 | | | Model 2 | | | Model 3 | | | Model 4 | | |
| | Coef | SE | Sig | Coef | SE | Sig | Coef | SE | Sig | Coef | SE | Sig |
| Country of Birth (ref Scotl | <i>,</i> | | | | | | | | | | | |
| England or Wales | 0.392 | 0.066 | *** | 0.415 | 0.052 | *** | 0.266 | 0.058 | *** | 0.270 | 0.058 | *** |
| Outside Great Britain | 0.300 | 0.112 | *** | 0.277 | 0.091 | *** | 0.310 | 0.104 | *** | 0.299 | 0.104 | ** |
| Place of Residence 1991 (r | ef Countrys | ide) | | | | | | | | | | |
| Town | | | | 0.020 | 0.032 | | 0.061 | 0.035 | | - | - | - |
| Other City | | | | 0.188 | 0.035 | *** | 0.228 | 0.039 | *** | - | - | - |
| Edinburgh | | | | 0.466 | 0.048 | *** | 0.329 | 0.053 | *** | - | - | - |
| Glasgow | | | | 0.189 | 0.048 | *** | 0.215 | 0.052 | *** | - | - | - |
| Female (ref Male) | | | | | | | 0.056 | 0.027 | * | 0.059 | 0.027 | ** |
| Age 1991 (in years) | | | | | | | -0.040 | 0.002 | *** | -0.038 | 0.002 | *** |
| Ethnic minority (ref not eth | | | | | | | -0.769 | 0.256 | *** | -0.780 | 0.259 | *** |
| Change in presence of chil | | Children) |) | | | | | | | | | |
| No Child 1991, Child 200 | 01 | | | | | | -0.194 | 0.044 | *** | -0.179 | 0.044 | *** |
| Child 1991 and 2001 | . 1 | | | | | | 0.011 | 0.040 | | 0.039 | 0.040 | |
| Child 1991, no Child 200 | | 1 0 0 0 1 | 、 、 | | | | -0.010 | 0.038 | | -0.001 | 0.039 | |
| Change in Household (ref | | and 2001 |) | | | | 0.020 | 0.050 | | 0.051 | 0.050 | |
| Couple 1991, single 2001 | | | | | | | -0.028 | 0.058 | | -0.051 | 0.058 | |
| Single 1991 and 2001 | | | | | | | -0.040 | 0.046 | | -0.037 | 0.047 | *** |
| Single 1991, couple 2001 | | ` | | | | | 0.178 | 0.042 | | 0.155 | 0.042 | * * * |
| Change in health (ref no he | ealth probler | ns) | | | | | 0.205 | 0.000 | | 0 411 | 0.000 | |
| Ill in 1991 and 2001 | | | | | | | 0.395 | 0.233 | ** | 0.411 | 0.233 | |
| Ill 1991 only | | | | | | | -0.235 | 0.147 | *** | -0.241 | 0.147 | *** |
| Ill 2001 only | (f | 1:6:4:) | | | | | -0.157 | 0.063 | * * * | -0.152 | 0.063 | * * * |
| Over 18 qualification 1991 | (rer no qua | incation) | | | | | 1 429 | 0.057 | *** | 1 400 | 0.059 | *** |
| Vocational | | | | | | | 1.428 | 0.057 | *** | 1.423 | 0.058 | *** |
| Degree or higher | | | | | | | 1.978 | 0.090 | 4.4.4. | 1.949 | 0.091 | |
| Tenure 1991 (ref home ow Social Renter | ner) | | | | | | -0.750 | 0.033 | *** | -0.729 | 0.033 | *** |
| Private Renter | | | | | | | -0.730 | 0.055 | *** | -0.729 | 0.055 | *** |
| 1991 and 2001 Place of Re | sidanca (Ra | faranca: (| ountry | sida Coun | trusida) | | -0.319 | 0.000 | | -0.317 | 0.001 | |
| Glasgow - Glasgow | sidence (Re | lefence. C | Jounny | side - Couli | liyside) | | | | | 0.177 | 0.063 | ** |
| Glasgow - Edinburgh | | | | | | | | | | 1.991 | 0.603 | *** |
| Glasgow - Other City | | | | | | | | | | 0.571 | 0.118 | *** |
| Glasgow - Town | | | | | | | | | | 0.521 | 0.188 | *** |
| Glasgow - Countryside | | | | | | | | | | 0.913 | 0.199 | *** |
| Edinburgh - Glasgow | | | | | | | | | | 0.492 | 0.804 | |
| Edinburgh - Edinburgh | | | | | | | | | | 0.390 | 0.059 | *** |
| Edinburgh - Other City | | | | | | | | | | 0.403 | 0.316 | |
| Edinburgh - Town | | | | | | | | | | 0.658 | 0.161 | *** |
| Edinburgh – Countryside | | | | | | | | | | 0.486 | 0.173 | *** |
| Other City - Glasgow | | | | | | | | | | 0.847 | 0.169 | *** |
| Other City - Edinburgh | | | | | | | | | | 1.479 | 0.370 | *** |
| Other City - Other City | | | | | | | | | | 0.268 | 0.044 | *** |
| Other City - Town | | | | | | | | | | 0.402 | 0.097 | *** |
| Other City – Countryside | | | | | | | | | | 0.350 | 0.099 | *** |
| Town - Glasgow | | | | | | | | | | 0.539 | 0.267 | * |
| Town - Edinburgh | | | | | | | | | | 0.692 | 0.202 | *** |
| Town - Other City | | | | | | | | | | 0.472 | 0.193 | ** |
| Town - Town | | | | | | | | | | 0.115 | 0.039 | *** |
| Town - Countryside | | | | | | | | | | 0.229 | 0.072 | *** |
| Countryside - Glasgow | | | | | | | | | | 0.179 | 0.268 | *** |
| Countryside – Edinburgh | | | | | | | | | | 1.052 | 0.238 | *** |
| Countryside - Other City | | | | | | | | | | 0.553 | 0.129 | *** |
| Countryside - Town | | | | | | | | | | 0.309 | 0.072 | *** |
| Constant | -1.122 | 0.040 | | -1.326 | 0.024 | | 0.076 | 0.084 | | -0.103 | 0.087 | |
| Log Likelihood | -19,659 | | | -19,599 | | | -16,777 | | | -16,711 | | |
| Wald | 44.99, | | | 183.61, | | | 2,800.80, | | | 2,933.61 | | |
| Initial Log Likelihood =-19 | 9,691.785, N | |) | , | | | , | | | | | |
| *=p<0.10; **=p<0.05; *** | *=p<0.01 | | | | | | | | | | | |

Table 3: Probability of moving into high occupational status group in 2001 for individuals in low occupational status group in 1991

| | | Model 5 | | Ν | Aodel 6 | | Model 7 | | |
|------------------------------|-----------------|--------------|-----|-------------|---------|-----|-----------------|-------|-----|
| | Coef | SE | Sig | Coef | SE | Sig | Coef | SE | Si |
| Country of Birth (ref Scotl | land) | | | | | | | | |
| England or Wales | 0.309 | 0.076 | *** | 0.299 | 0.076 | *** | 0.071 | 0.084 | |
| Outside Great Britain | 0.735 | 0.152 | *** | 0.710 | 0.152 | *** | 0.321 | 0.166 | |
| Place of Residence 1991 (1 | ref Countrysio | de) | | | | | | | |
| Town | | | | -0.085 | 0.056 | | -0.027 | 0.062 | |
| Other City | | | | 0.043 | 0.060 | | 0.015 | 0.066 | |
| Edinburgh | | | | 0.203 | 0.076 | ** | -0.001 | 0.083 | |
| Glasgow | | | | 0.246 | 0.085 | ** | 0.221 | 0.095 | * |
| Female (ref Male) | | | | | | | -0.206 | 0.049 | *** |
| Age 1991 (in years) | | | | | | | -0.015 | 0.003 | *** |
| Ethnic minority (ref not eth | • | · | | | | | 0.194 | 0.403 | |
| Change in presence of chil | · · | Children) | | | | | | | |
| No Child 1991, Child 20 | 01 | | | | | | -0.067 | 0.080 | |
| Child 1991 and 2001 | | | | | | | 0.151 | 0.070 | * |
| Child 1991, no Child 200 |)1 | | | | | | 0.167 | 0.066 | * |
| Change in Household (ref | couple 1991 | and 2001) | | | | | | | |
| Couple 1991, single 2001 | | | | | | | 0.062 | 0.102 | |
| Single 1991 and 2001 | | | | | | | -0.050 | 0.080 | |
| Single 1991, Couple 2001 | 1 | | | | | | -0.034 | 0.080 | |
| Change in health (ref no he | | (c) | | | | | -0.054 | 0.000 | |
| Ill 1991 and 2001 | | (3) | | | | | 0.349 | 0.386 | |
| Ill 1991 only | | | | | | | -0.219 | 0.254 | |
| Ill 2001 only | | | | | | | -0.273 | 0.098 | *** |
| Over 18 qualification 1991 | l (ref no quali | ifications) | | | | | -0.275 | 0.070 | |
| Vocational | r (i'er no quun | (fileations) | | | | | 1.492 | 0.060 | *** |
| Degree or higher | | | | | | | 2.060 | 0.080 | *** |
| Tenure 1991 (ref home ow | mer) | | | | | | 2.000 | 0.000 | |
| Social Renter | lier) | | | | | | -0.612 | 0.070 | *** |
| Private Renter | | | | | | | -0.433 | 0.098 | *** |
| Constant | 1.558 | 0.023 | *** | 1.528 | 0.041 | *** | 1.523 | 0.156 | *** |
| Log Likelihood | -7,037.3 | | | -7,025.061 | | | -5,929.091 | | |
| Wald | 43.62, df | | | 68.19, df=6 | | | 1,631.89, df | f=22 | |
| Initial Log Likelihood = -7 | , | | | | | | ·,···, ···, ··· | | |
| *=p<0.10; **=p<0.05; *** | | , | | | | | | | |

Table 4: Probability of staying in high occupational status group in 2001 for individuals already in high occupational status group 1991