Intergeneration and intrageneration social mobility in Britain

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Abstract

Analyses of social mobility remains divided between structuralist (e.g. class structural) and individualist (e.g. status attainment) perspectives. Primarily adopted by sociologists, the former focus on the opportunity structure in which social mobility operates, while the latter, adopted by economists, on the individual attributes associated with mobility. It is becoming increasingly clear however that it is vital to draw from both perspectives to understand social mobility.

I model two British cohorts using latent class growth model to uncover the heterogeneous paths of social mobility within these two cohorts. The National Child Development Study 1958 (NCDS) and the British Cohort Survey 1970 (BCS) cohorts are followed over the period up to 2004. By inter-relating the patterns of their class career mobility with individual and class attributes this study empirically assess the importance of social determinants and individual attributes in unprecedented detail.

I find four distinct trajectories of male mobility as the 1958 NCDS cohort members go through 23 years of participation in the labour market between 1981 and 2004. Cohort members tracing different trajectories come from different social class of origin, thus opening up a new dimension of inter-generational social mobility. For the first time one sees the effects of social background to persist up to the ages of 40s, so contradicting the assumption in social mobility literature

that mid-30s marks a key point of occupational maturity. This is a new dimension of intra-generational social mobility. Heterogeneity and instability in social mobility are evident over this long period.

The analysis of the 1970 BCS male cohort shows only three distinct paths of mobility. This partly reflects the shorter period of observation. Nonetheless, there is evidence of a decrease in heterogeneity; the early stage of their life cycle is more homogeneous relative to the same stage in the life cycle of the first cohort. This decrease in heterogeneity is a dynamic aspect hitherto unknown. Like the first cohort members, the chance of following one of these paths rather than the other is also structured by social class of origin.

Although the analysis of female social mobility is more complicated, I am able to draw their multiple trajectories of social mobility. Systematic differences remain between the class career patterns of women compared to those of men. With latent class growth model one can build a nuanced account of how inequalities in inter-generational social mobility relate to the dynamics within a life cycle or intra-generational social mobility.

1 Introduction

Although it remains an empirical cornerstone of social mobility research, the view that social class continues to strongly affect the life chances of people in Britain, and in other industrial countries, has come under increasing scrutiny and dispute (Erikson and Goldthorpe, 1993; Savage and Egerton, 1997; Blanden *et al.*, 2004; Ermisch and Francesconi, 2004; Bowles *et al.*, 2005; Breen, 2005; Goldthorpe and Jackson, 2007).

Three main concerns are apparent. First, much of the work establishing the persistence of social class in affecting social mobility relied on cross sectional surveys (Goldthorpe, 1987; Erikson and Goldthorpe, 1993). These surveys focused largely on the relationship between parent's class position and that of the respondent at a specific moment. Although there has been increasing interest in work life or intra-generational mobility, this remains secondary. Goldthorpe argues that occupational achievement at one point in

time or at a stage in the career of respondent can capture or summarise the final destination. Therefore, social mobility questions can be answered by comparing origin or parents' occupational achievement with these destinations. However, this remains problematic (see Sorensen's critique of standard mobility tables 1990). Moreover, during the past two decades there has been a striking growth in the development of panel studies which lend themselves to detailed consideration of studies of intra-generational mobility. It is now no longer adequate to ignore the issues of intra-generational mobility.

Second, the focus on social class has been associated with a critique of the view that social mobility is the product of individual attributes (see generally, Savage and Butler (1995)). However the greater availability of data on individual attributes – ranging from detailed accounts of income as well as intelligence and attitudes – in panel studies has been used to dispute the importance of class. In critique of those sociologists who have argued that variables measuring individual merit demonstrate that class inequalities are unimportant (Saunders, 1997), it has been shown by Goldthorpe and Breen and Savage and Egerton that merit variables are associated with parental class. Those from privileged backgrounds are more likely to report higher intelligence scores, or more hard working attitudes. Such findings are not, however, able to express the nature of this inter-relationship between social and individual variables, and in particular whether individual merit variables are actually surrogates for social background.

Third, it has been argued that measures of class are themselves too crude to accurately measure mobility. An increasingly pessimistic account of equalities in social mobility led by economists has used income measures to present an account of declining mobility, which contradicts the emphasis of Goldthorpe and his associates regarding relative stability in mobility rates. In an influential paper, Blanden *et al.* (2004) examine inter-generational mobility using incomes of fathers and sons observed in two British cohorts: The National Child Development Study 1958 (NCDS) and the British Cohort Survey 1970 (BCS). They find that "the economic status of the 1970 cohort is much more strongly connected to parental economic status than the 1958 cohort." They report that sons from the top rather than the bottom

quintile of parental income distribution receive 20 percent premium in the first cohort versus double that for the second cohort. This argument poses challenges to sociologists, whose use of social class measures has largely led to the view that there is no trend in mobility inequalities. A recent studies on contemporary social mobility in many European countries is collected in (Breen, 2005).

Goldthorpe and Jackson (2007, :541) take issue with the economists' conclusion. They find that the answer to the question of whether 'there is a stronger association between the circumstances of children and their parents is now emerging' is essentially negative. They argue, in critique of Blanden and colleagues, that patterns of social mobility remain constant over the two cohorts. It is also true that even studies of inter-generational income mobility in the US appear to have come closer to the conclusion that 'the apple falls even closer to the tree than we thought' (Mazumder, 2005). The most recent comprehensive survey of inter-generational income mobility (Björklund and Jäntti, 2008) is nowhere near explicating what mechanisms lead to this dispiriting findings. It instead calls for multiple mechanisms beyond income proceses to be explored.

It is therefore clear that the influential view that social class is fundamental to social mobility is under question, even in the UK which has historically been the nation where such arguments have appeared to be most clearly demonstrated. In this paper I approach this debate by incorporating two related conceptions: temporal dynamics and heterogeneity. They lay at the heart of the debate between economists and sociologists. Jenkins (1987), for instance, warns us that taking a snapshot of social mobility, say at the age of 35, is unsafe because lifecycle biases are demonstrably large as well as indeterminate in direction. He urges a 'video' of intragenerational mobility to be taken as well. Goldthorpe (2005, :75) echoes this for sociologists when he predicts that "work-life mobility will be a major growth area over the next decade or so." In this paper we show that it is much sooner than that. I use the same data that the argument of Blanden *et al.* (2008) regarding the declining rate of mobility draws upon. However Blanden and colleagues do not adequately relate work-life mobility (intra-generational) mobility to

inter-generational mobility. Although the foci on temporal dynamic and heterogeneity have been recognised separately for some time they have not been incorporated into the mainstream analysis. This paper combines them in a novel approach. I propose:

- that despite the numerous possible associations between origin and destination, the underlying patterns of association are neither homogeneous where one set of rates captures all associations nor so numerous as to defy any attempt at summary; simultaneously
- that limited number of patterns, called trajectories, of intra-generational mobility are commonly traced over decades of participation in the labour market, and these traces cannot be reduced to a snapshot of participation in the labour market; lastly,
- that the family of origin matters (through its access to various capital, assets and resources) in putting people into these trajectories.

Focusing on the dynamic nature of social mobility i.e. its inter-generational and intra-generational aspects, I examine how class fractions may have specific mobility trajectories which demands a more nuanced account than that currently exists. I carry out this proposal by looking for heterogeneous latent groups. These latent groups are defined by their common time-ordered intra-generational trajectories. I uncover multiple latent trajectory groups by applying the latent class growth model to the cohort members whose labour market participations are followed over periods of more than a decade and three decades.

If we acknowledge the need for an intra-generational perspective as well as for an analysis that is sensitive to heterogeneity, we can seek further implications of these latent trajectories. For instance, can the different trajectories be assessed as to their desirability? Linking with inter-generational concerns, does social class of origin matter in putting people into one trajectory and not another? More individually, how significant are personal attributes, such as merit, in allowing people to follow one trajectory and avoid others?

I compare two different cohorts, so that age related change within a specific cohort, and between them, can be attended to. I use data on two cohorts born in 1958 (the National Child Development Study, NCDS) and the 1970 (the British Cohort Study, BCS), to examine dynamics of class careers over a 46 year period (30 and 16 year, respectively).

2 Towards inter and intragenerational social mobility

Studies of inter-generational class mobility seem to be more significant in British social science than in other countries such as the US. Compounding that, inter-generational income mobility seem to dominate in the US and in economics. However, even studies of inter-generational income mobility in the US appear to have come closer to the conclusion that 'the apple falls even closer to the tree than we thought' Mazumder (2005). The most recent comprehensive survey of inter-generational income mobility (Björklund and Jäntti, 2008) is nowhere near explicating what is the mechanisms that lead to this dispiriting findings. It instead calls for multiple mechanisms beyond the income processes to be explored.

2.1 Focus on class careers: what would it add to our understanding?

Breen and Goldthorpe (2001) recognise the need to seriously examine the importance of merit on social mobility. Their use of the two British cohort data allowed them to seriously test whether merit might be important. They compared the experience of two different cohorts (1958, 1970) in order to assess whether Britain is becoming increasingly meritocratic. This comparison sidesteps the issue of whether there is a true meritocratic society by looking at relative changes over two cohorts in the strengths of ability, effort and education (to capture merit) in mediating social mobility.

There are two major contributions that one can make with the intra-

generational focus. It is often assumed that occupational achievement at a point in time or a stage in one's class career adequately capture or summarise the final destination. Therefore, social mobility questions can be answered by comparing origin or parents occupational achievement with this destination. However, this use of a stage as a summary is inadequate. The adequacy of a stage as a proxy for a career was rarely demonstrated despite the available data on occupational careers. This adequacy remains an empirical question. During one's career in the labour market, it is expected some movements may happen. This can be sideways or vertical. Although it is possible that over one's entire working life one's series of occupations which make a career falls within a particular occupational class, there is no theoretical reason why these movements cannot cross class boundary. Goldthorpe (1987 :52-53, 70-72) claims that "By this age [35], men will tend to have achieved a stage of relative 'occupational maturity', in the sense that from then onwards one may expect if not a cessation, at all events a marked falling-off in the probability of job changes which involve major shifts of occupational level." It remains, however, an important empirical question whether, beyond certain stage, careers in contemporary labour market indeed are confined to an occupational class boundary. Therefore, important questions that this focus adds are related to patterns of careers. They include whether there are predominant patterns of careers, whether careers tend to fall within class boundaries, and whether certain starting point are more likely to lead to sloped pattern. These are of course intra-generational mobility concerns although much works which fall within this rubric use income rather than occupational achievements. After examining this point we can make a more informed judgement whether taking a point in time as a measure of destination is warranted; or whether it is warranted only for certain conditions.

Second, having empirically examined career patterns one can then explore their relationship with inter-generational mobility patterns. The point of explanation here is whether the shape of career patterns is related to class of origin. For instance, whether children of the working class predominantly stay in a limited occupations set or in a flat career pattern, or who are those who managed to join the sloped career pattern. Through this strategy, we can

systematically relate inter and intra-generational mobility. Also, such strategy enables systematic exploration of the role of individual level attributes, such as merit, in affecting career patterns. In this way, one can empirically assess how these attributes' effects compare with that of social class. Such strategy thus enable researchers to move beyond the stand off between sociologists and economists which has characterised much previous research. By questioning how vertical mobility (potentially inducing sloped pattern) as opposed to confined-within-class mobility (flat pattern) is related to merit we can address how significant human capital is in affecting mobility.

There are two dimensions to consider about firms human resources policies that, in interaction with workers experience, may lead to an observed vertical mobility. One, firms in different sectors of the economy put different emphasis on merit such as ability. For instance, in high technology industries relative to lower technology industries, there may be a premium put on highly and educated and specifically trained workers. In other words, different sector are more porous in allowing merit to be considered. Two, firms have different selection (applied at workers' entry into the labour market) and promotion (applied through out workers' duration in the labour market) policies. It is most plausible that, again in certain sector, considerations for promotion are different from consideration for selection which lead to increasing porosity. Both points mean that longer experience in the labour market can be used to signal to firms (in different sector and at different times) about the merit of a worker and that firm can read this signal. Longitudinal information on employers characteristics, beyond those required to derive occupational class, are not normally available in data sets used by social mobility researchers. Our purpose here is to heuristically reason why intragenerational mobility is possible. Mine is not to test this explanation empirically for reasons related to data limitation.

At this point the following research questions suggest themselves. They are eminently suitable for examination using intercohort design such as this study.

- What do patterns of intra-generational mobility or trajectories look like across the two cohorts?

- By implication of multiple trajectories, what is the relative contributions of ability, effort and education versus social class of origin on destination in putting people into these trajectories?
- How should our view about inter and intra-generational social mobility be modified by these different rates of mobility? Especially, can we uphold the contention that one particular snapshot or stage in the life cycle is representative of inter-generational social mobility or should our claim be more circumspect?
- Should we be interested in the possibility that the 'mature' age when occupational changes is retreating further into the horizon?

3 Two British cohorts

The National Child Development Study 1958 (NCDS) and the British Cohort Study 1970 (BCS) are two ongoing cohort studies that follow the lives of all children born in a certain week in those years. The 17,414 NCDS cohort members have been surveyed at the ages of birth through most recently age 46 and for our purpose we use data from the ages of 23, 33, 42 and 46. We can explore heterogeneous latent trajectory groups for this cohort using observation of over 23 years of their attained destinations in the labour market. These latent trajectory groups summarise patterns of 'stations in life' that the cohort members achieved throughout the period.

The 17,198 BCS cohort members have been surveyed at the ages of birth through 34 and for our purpose we use data from the ages of 26, 30 and 34. There has been attrition of cohort members over the years but following sturgis-sullivan2008 who assume that the observations are missing at random we estimate latent class growth model using maximum likelihood which gives consistent and efficient estimates. Their latent classes can be compared with the older cohort.

Variables For the NCDS, parents social class or origin is derived from questions asked in the second wave. It is mapped onto Goldthorpe scheme

using the standard method described in Savage et al (1992) Appendix 2 :230. Destinations at different ages are derived from questions about current or last job which were coded in Goldthorpe class scheme. For the NCDS, measure of ability is provided by the result of the General Ability Test and standardised to unit normal. Measure of effort is provided by the Academic Motivation Scale and standardised to unit normal. For the BCS, the nearest comparable measures are the British Ability Scales for ability and the Caraloc scale for effort. Note that for the latter, the raw data include two trick questions that have been purged before calculation or normalisation. Highest educational qualification is recoded into three categories of none, up to CSE or A level, and Degree or more.

We can use these as indepdendent variables to distinguish one trajectory group from the other based on some antecedent factors, the most important of which is social class of origin. This will allow us to go beyond static interpretation of association between origin and destination to dynamic interpretation such as whether certain origin proffer an effect that last beyond a station. By comparing these class factors with other meritocratic factors we can gauge their relative effect.

In our analyses we first report the trajectories for men and women separately. This allows us to explicate the extent of gender differences, and empirically assess its relationship to class.

4 Latent class growth analysis for inter and intragenerational mobility: an early attempt

The first study to use latent class growth analysis (LCGA) to examine a series of occupational class attainments is Sturgis and Sullivan (2008). They estimate latent trajectories of occupational class attainment of fathers and sons using the British Cohort Study 1970. As a first attempt in studying a series of class attainments of parents and their children, there is more emphasis on the method than on the analytical issue of mobility. The study is inadequate on three grounds. First, it fails to address the main concern

of social mobility i.e. deriving the association between origin and destination, adjusting for various other factors, due to failure to distinguish origin from destination in the analysis and; second, the time inconsistency in the method's application produces results that are not essentially interpretable in terms commonly used in social mobility studies. Lastly, inflation in the number of latent trajectories. Sturgis and Sullivan (2008, :72) construct a trivariate dependent variable where the first was father's social class when respondents age 10, the second and third were the respondent's social classes at ages 26 and 30 years. This construction which puts both origin (father's social class) and destination (respondent's social class) into the dependent variable runs counter to the analytical distinction between origin and destination in social mobility studies and renders the result seriously inadequate. The distinction between origin and destination and the relationship between them are at the core of social mobility studies. Breen (2005, :2), in explicating social mobility research paradigm in sociology, suggests that the paradigm 'is characterised by an interest in addressing a set of widely agreed upon questions, and shared sets of concepts and methods applied to this end.' A set of crucial analytical concepts consists of origin (predominantly parent's or father's social class) and destination (often, respondent's social class). The distinction permeates social mobility studies. Here are a couple of instances: 'Studies of inter-generational mobility ... examine the relationship between people's current circumstances and those in which they originated; the basic datum for the study of inter-generational social mobility is a mobility table ... Each member of the sample is allocated to a cell of the mobility table according to his or her own class position and the class position of his or her family when he or she was growing up. This cross-tabulation of class origins by class destination quite easily reveals patterns and rates of mobility.' From the point of view of social mobility research, Sturgis and Sullivan's treatment of parents' social class as part of destination, rather than as part of origin is at least questionable.

As a result of this analytical confusion, time flows backward in the application of the method; this in turn renders the results uninterpretable. Recall that the first of the trivariate dependent variable is the father's social

class when respondents were aged 10. One of their time-invariant predictors, school at age 16, transpired posterior to the dependent variable. The notion of prediction is central to Sturgis and Sullivan (2008, :73), 'we predict membership of the different latent trajectory groups with covariates denoting merit, cultural capital and social advantage.' Thus we have a situation where a predictor predicts past event; respondent's school type predicts his father's social class. One cannot conceive to interpret this as a predictor that tells us which growth process will the respondent's likely to follow because the growth process has set off even before the predictor transpires.

For most social mobility studies, father's social class is a 'predictor' and member's social class is the dependent variable. Of enduring interest in this field is to gauge the strength of various predictors. Researchers are interested in the strength of this predictor, social class of origin, relative to the strength of other predictors such as meritocratic factors. To make this comparison possible social class of origin and meritocratic factors should be put conceptually on an equal footing i.e. as predictor. This is the role of social class of origin in the corpus of literature on social mobility. Savage and Egerton (1997) for instance first discuss the effect of origin on destination (their table 1 for men) and then assess how much the strength of the relationship is reduced once ability is included (their tables 3 and 4 for men). In other words, Breen and Goldthorpe (2001, :89) seek to fit a model to capture the association between origins and destinations. Then introduce measures of individual ability, effort and educational attainment and examine the effects of doing so on the [origin] parameters initially estimated. To the extent that these parameters shift towards zero, the association between origins and destinations can be regarded as being mediated (by ability, effort and education).

To provide more detail on the time inconsistentcy, we restrict ourself to their paper and follow closely two of their references (Muthn, 2001 and Bourdieu, 1986) to show the problem. In any growth analysis, latent class growth analysis included, temporal order is important and time-invariant predictor should be conceptualised and measured prior to or contemporaneous with the predicted (or instance of the dependent variable).

Latent class growth analysis (Muthén, 2001, :12ff) is designed to uncover few latent trajectories based on repeated measures, at different times, of univariate outcome such as social class measured repeatedly. In their application, the temporal order of predictor and predicted is thus back to front which goes against a defining characteristic of latent class growth analysis.

If for the sake of illustration we assume that linear trend suffices as captured in Λ_{u_k} in Muthén (2001, 13) then the logits for the u repeated measures of social class may be expressed as

$$\Lambda_{u_k}\eta_{ui} + \mathrm{K}_{u_k}x_i$$

where η_{ui} contains the intercept and trend growth factors expressed as

$$\eta_{ui} = \alpha_{u_k} + \Gamma_{u_k}x_i.$$

The focus is on Γ_{u_k} parameters which capture the effects of time-invariant predictors on the growth factors. One of these, type of school at age 16, existed and measured only *after* the trajectories started (father's social class in 1980). Clearly the predictor is out of step with the first measure of the predicted.

Table 1: Illustration of misconception in the application of LCGA in Sturgis and Sullivan (2008)

Cohort member	Year	Dependent	Predictor School type at 1986
1	1980	Father's class, 1980	Not yet existed
1	1996	Member's class, 1996	Private
1	2000	Member's class, 2000	Private
2	1980	Father's class, 1980	Not yet existed
2	1996	Member's class, 1996	State
2	2000	Member's class, 2000	State

Table 1 illustrates the situation where the predictor is conceptually *posterior* to the dependent variable. When the growth process commences in

the latent class growth analysis, the time-invariant predictor should conceptually exist before or contemporaneously. The observed growth process in this case is understood to be social class measured repeatedly. However, the first measure for each cohort member shows clearly that the predictor, i.e. school type at age 16, was still undefined.

An obvious reaction to this point is: what if this particular predictor is dropped? The answer is it may not help for two reasons: first, analytical confusion regarding origin and destination remains and second, the only remaining predictor faces difficulty in interpretation. In the application of LCGA, time-invariant predictor should exist prior to or contemporaneous with the start of the growth process for an interpretation couched in terms of prediction to make sense. This time order basis of interpretation is implicitly shared as shown in the case of one other predictor i.e. cultural capital or 'accumulated cultural knowledge which confer power and status, protecting middle class children from downward mobility' (Sturgis and Sullivan, 2008, :74). Bourdieu (1986, :242), which they refer to justify this predictor, ironically starts with the pronouncement on time ordering which is violated here, 'The social world is accumulated history'. Further down, Bourdieu (1986 :247) explicates the role of cultural capital in the two part logic of the 'protection of middle class children from downward mobility'. First, the protection 'process mainly depends on the cultural capital embodied in the whole family,' or 'in the origin' in our terms. Second, the accumulation process 'covers the whole period of socialisation.' Bourdieu's notion of cultural capital thus puts time priority to family of origin, then to (or contemporaneous with) socialisation period. The treatment of time in the case of this remaining predictor is again order-inconsistent.

Lastly, because of the variance of the fathers' social class is of a different character from the variances of the (repeated) respondents' social class, the number of derived latent trajectories may be inflated. The unobserved heterogeneity of fathers' is reasonably captured by a random variable; likewise the unobserved heterogeneity of respondents' is also reasonably captured by another random variable. When both are forced to be captured together because fathers' and respondents' social classes are put in a trivariate de-

pendent variable, the latent trajectories are asked to capture unobserved heterogeneities from two sources (even though they are related). It would not be surprising that the number of latent trajectories will be smaller if fathers' social class is not part of the dependent variable because the latent variable is asked to capture unobserved heterogeneity only due to respondents. Evidence consistent with this will be the reduced number of latent trajectories once fathers' social class are not part of the dependent variable.

In sum, all this extrication is unnecessary if one puts origin as one of the predictors and destinations as the dependent variables.

5 Latent trajectories: NCDS male cohorts

The analysis of the older male cohort, shows a latent class growth model with four trajectories fit the data best. The number of trajectories and corresponding BIC, a widely used criterion in social mobility research, follow where smallest criterion indicates the best fit: (number of trajectories = 2; BIC = 16787), (3; 16560), (4; 16556) and (5; 16576). These pairs show that despite there being hundreds of potential paths ( ) of social class over the first 46 years of cohort members' lives, there are only about 4 well-trodden paths or trajectories. Compared to Sturgis and Sullivan (2008) who find five or six latent trajectories, this is notable since we find fewer trajectories despite the longer duration that we cover. The longer the duration, by law of combinatorics, the larger the number of trajectories that can be found. In their case, up to the age of 30 they find five or six different trajectories.

Additional details of modelling decision are as follows. To allow for the possibility of upward and downward intragenerational mobility, quadratic terms of age are included. Linear terms only would be unnecessarily inflexible by ruling out inflexions. Such decision has turned out to be sensible as the results later show. The only other time varying factor that could potentially affect class attainment or career is current level of education. This will be discussed later.

These four trajectories are described in terms of their 'stations' or social class over time, followed by their profiles in terms of their social class of

origin. Then I present more explanation as to what meritocratic factors and origin put these sons into certain desirable trajectory and avoid others.

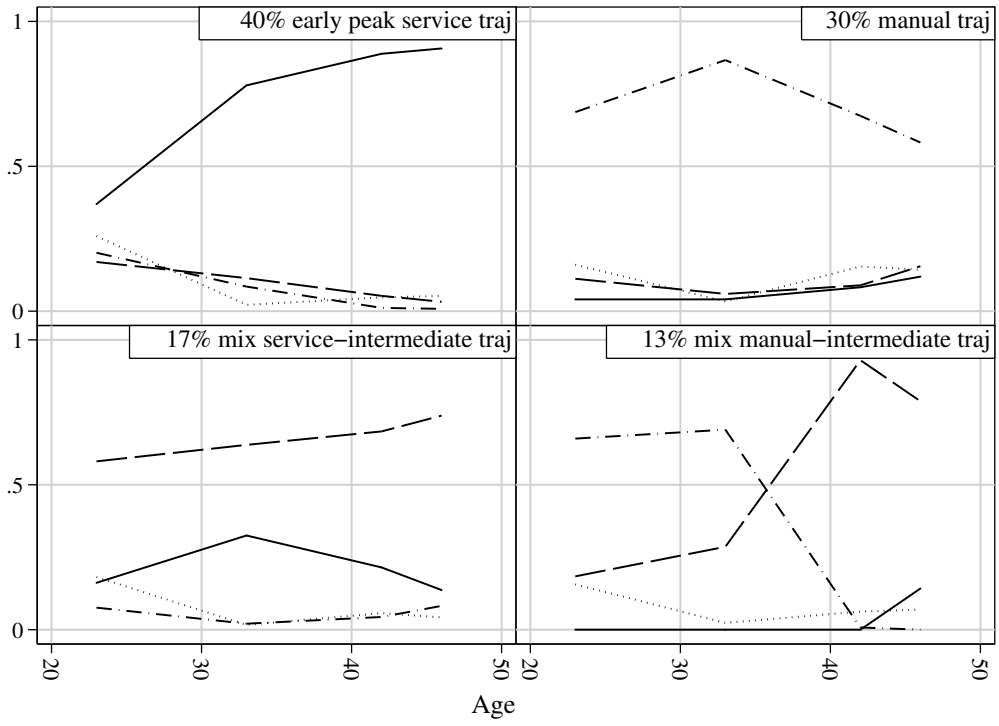

Figure 1: Latent trajectory groups of male cohort members of the NCDS up to age 46. Solid: service class, long dash: intermediate class, dash-dot: manual class, dot: out of the labour force.

To delve deeper into the characteristics of these latent trajectory groups I plot these 'stations' or classes for each group and delineate the proportions over time of each social class and out of the labour market position. These are presented in Figure 1.The first latent trajectory group comprises 40% of the sample. This we label the 'the early peak service trajectory' group for ease of reference if nothing else. Interpretation of class proportions is conditional in the sense that given that the cohort members belong to this group we can read the class proportions at each moment in time. Thus we see that about one quarter of them were of service class occupation in the first observation (at age 24), which increased to about four-fifths by early 30s

and stayed there until about mid-40s. The time path taken by this dominant proportion warrants the label early peak service trajectory. This is the kind of group which Goldthorpe recognises as that which moves into the service class early, before the age of 35 which he thinks is that of 'occupational maturity'.

Nearly one in three belong to the second latent trajectory group which predominantly made up of those in manual jobs at most observations. Cohort members following this trajectory occupy manual class position up to their early 30s but by their 40s there is a decline in the proportion of this class. However, rather than moving into other class positions, this is mainly out of the labour market.

The third latent trajectory group (less in number than the second group at 17%) is made up of a mix of intermediate and service classes. This group displays a surprising profile of intragenerational downward mobility. First we also see continuing change past the age of 40s. A proportion of more than half of this group starts at the intermediate occupations; this proportion continues to grow until the age of 46. Another major proportion in this group is the service class which initially increases up to the early 30s but then declines to the initial level. This is likely to be the source of continuing increase in the proportion of the intermediate class mentioned earlier. Together, the observed changes to the service and intermediate classes over time are a manifestation of intragenerational downward mobility of the service class onto the intermediate class after the age of mid-30s. Given the widespread focus on the dominance of upward over downward mobility in British research, this is an important finding. Less remarkable is the relatively constant proportions of the working class and those out of the labour market in the group during the period. This intragenerational downward mobility affecting nearly one in five of the population is a dynamic hitherto unknown in the social mobility literature.

The last latent trajectory group (a minority of 13%) is made up of a mix of intermediate and manual classes. Remarkably, this is the group that displays intragenerational upward mobility. Initially, the manual class predominate and the intermediate class is secondary. As above, the other categories can

be safely ignored for the moment. A cross in their paths of proportion happens in mid-30s. Together, it appears that the manual class are able to attain intragenerational upward mobility to the intermediate class. This is so much so that the proportion of the manual class decline significantly, and simultaneouosly, the proportion of the intermediate class increase comparably significantly. There is also a hint that some of the intermediate class gain entry to the service class by the age of 40s; the spike at the bottom of the panel evinces this. This is another insight on intragenerational mobility that is little, if any, remarked upon in the extant literature.

These trajectories therefore show that substantial numbers of men have dynamic trajectories and are not usually found in one class position over most of their working lives. Evidently, insights about social class changes both downward and upward mobilities post-'mature' stage of mid-30s are revealed here. For some cohort members changes heave at the beginning whereas for others such changes occur past their mid-30s or beyond the commonly accepted 'mature' occupation-age. Conversely, there are obvious stability at the top and bottom of occupational strata (panel one). Another part related to the effect of social class of origin will be discussed in the profile later.

More importantly, it appears that these trajectories are hierarchical and convey unequal life chances. The first latent class is the most advantaged, the second is least privileged. The decline (mix service-intermediate) trajectory is an undesirable trajectory whereas the upward (mix manual-intermediate) trajectory may be relatively more desirable because of the changes especially towards the later stage of the life cycle. Admittedly, there is no comparable body of knowledge about the intragenerational dynamics of class and their relationship with other life chances, health and illness.

By implication, if one were to calculate absolute and relative inter-generational mobility rates at different ages (equivalent to taking different slices say at ages 30 and 40) then the resulting rates will be significantly different from each other. Snapshots of social mobility mask much fluxes. This warrants caution as expressed by Jenkins (1987 :1158) to 'at the very least, ... be more temperate in the conclusions [writers] draw from existing data sets.' We have thus demonstrated the need to recognise flux and dynamic change

within social mobility research.

Here I discuss the parameters of change within each of the latent trajectories due to age and education in Table 2. We allow for a non-linear trajectory of class careers over time in order not to presuppose careers to be only up or down or constant throughout the long period covered here. This allowance has been warranted as we invariably find both age coefficients to be significant. It is also warranted in one other remarkable point, as the third latent trajectories show, the set of age coefficients here captures the possibility of downward trajectory. Here is one insight provided by latent class growth analysis, i.e. it can discover growth as well as decline. Education is all significantly positive here suggesting that more education leads to more chance for the intermediate and working classes to get into the service class. It is important to note that there is a set of coefficients (two for age and one for education) for each latent trajectories because conceptually we allow for the flexibility that these factors act differently for different groups in our sample. If there is no significant different between them, however, we may restrict the coefficients to be the same.

Table 2: varying coefficients of latent trajectories (equivalent to Figure 1)

Variable	Early peak service	Manual	Downward service-intermed	Upward manual-intermed	p
Size	40%	30%	17%	13%	
Social class of origin					
Age	-0.006	-0.203	0.325	-0.978	< 0.001
Age^2	0.001	0.003	-0.005	0.018	< 0.001
Education	0.370	0.478	0.617	0.356	< 0.001

5.1 Profiles of latent trajectories: NCDS male cohorts

I have shown above that neither homogeneity, where one aggregate trajectory or inter-generational association capture all 'stations' or social class positions over the period, nor constancy, where intragenerational mobility

stays the same, can sufficiently characterise the inter-generational mobility of this male cohort sample. We have seen four heterogeneous groups based on their trajectories, as well as, remarkable intragenerational changes within each of those groups. One can expect that relationship between these groups with origin and merit not to conform to expectation

The social profiles of the four latent trajectories in terms of their social class of origin is given in Table 3. The row sum amounts to one to reflect the distribution from each social class category into four trajectories. We can see that the service class families (compared to other families) tend to succeed in putting a majority of their sons onto the early peak service. Total proportion of trajectories service and downward service for the service class families is 78%. Notably, one in four of these experiences downward mobility by the age of 46, indicating a surprising amount of downward mobility at later ages. Next, the intermediate families have a fair chance (40%) of putting their sons into the most desirable trajectory. However, one in three of these whose children start in the service class cannot hold on to it and by his mid-40s find himself back in the intermediate class. The manual class families tend to put most of their sons onto the manual trajectory though a respectable 30% manage to put into the most desirable trajectory. We can also see that they are not over represented amongst the downwardly mobile third group, and are somewhat over represented amongst the upwardly mobile into the intermediate class.

Table 3: Where do the families put their sons into? Profile of latent trajectories of NCDS up to 2004 in terms of social class of origin

Trajectories	Early peak service	Manual	Downward service-intermed	Upward manual-intermed
Size	40%	30%	17%	13%
Social class of origin				
Service	59%	14%	19%	8%
Intermediate	40%	25%	21%	13%
Manual	30%	40%	15%	16%

I now develop this account further by looking at meritocratric as well as social variables so that we can assess the inter relationship between individual attributes and social characteristics - see Table 4. It shows that, for instance, the odds of sons born to the manual class family in competition against sons born to the service family in attaining early peak service trajectories and avoiding upward to intermediate trajectory is very small indeed, times: a tough proposition. In contrast, the odds of sons born to the manual class family in competition against sons from the service family in entering the manual trajectory and missing on the upward trajectory is times. In other words, quite likely. The effect of social class of origin (the inter-generational factor here) on the desirability of intragenerational trajectory is substantively significant as well as statistically significant.

Table 4: Origin, merit and trajectories of NCDS male cohorts up to 2004. Multinomial coefficients (odds ratios) where the last trajectory group (upward intragenerational mobility) is the reference.

Trajectories	Early peak service	Manual	Downward service-intermed	p
Origin, reference is service class				< 0.0001
Manual	0.38	1.38	0.50	
Intermediate	0.45	1.08	0.73	
Merit				
Ability	2.28	0.73	1.34	< 0.0001
Effort	0.38	0.65	0.50	< 0.0001

The effect of ability can be ascertained from the above table. One standard deviation of ability increases the odds to 2.28 times to reach the service trajectory and avoid the upward to intermediate trajectory. Effort, measured in terms of the internal academic motivation, is also significant. One standard deviation increase in internal motivation reduces the odds to 0.65 times (of those with average motivation) to get into the manual trajectory and avoid upward to intermediate trajectory. An interesting finding is that effort is associated with the reference trajectory of upwardly mobile, and that those in the most advantaged careers show much less effort. Indeed, the

downwardly mobiler show more effort than do these. It is measured ability, linked to class background, which appears to be of fundamental importance here.

In discussing these effects we must remember that there is no straightforward way of directly assessing the effects of meritocratic factors against factor of origin due to their different forms of measurement. The above figures however can give a handle on this assessment. Clearly both meritocratic and social origin factors are statistically and substantively significant. The inclusion of both merit factor and education has not eliminated the effect of social class of origin entirely, though it is implicated in mobility prospects.

6 Latent trajectories: NCDS female cohorts

I now present the trajectories for women, which can also be grouped into four clusters The number of trajectories and their counterpart BICs are as follows: (2; 17,525), (3; 17,174), (4; 17,030) and (5; 17,031). We follow with description of these trajectories before discussing their profiles and finally the effects of merit and origin on attaining these trajectories.

Figure 2 shows that there are marked differences between this set of trajectories compared to that of male trajectories. Taking each panel in turn we first encounter what can be called upward intermediate-service trajectories. Focusing on these two classes, we reserve our comment on the out of the labour market status (the dots) later. The service class appears to increase in later ages due to a decrease in the intermediate class especially towards the latter half of the period. This upward mobility, or move from intermediate to service class, is also linked to a move out of the labour market altogether. Nevertheless conversion from intermediate to service class is visible.

The second panel shows the predominantly intermediate class trajectory experienced by about one in four females in this cohort.

The most desirable trajectory is depicted in the third panel. There is a secular increase in the proportion of the service class here. Conversion into this class from both the intermediate and the manual class (though in a lesser degree) appears throughout the period. The slope of increase in

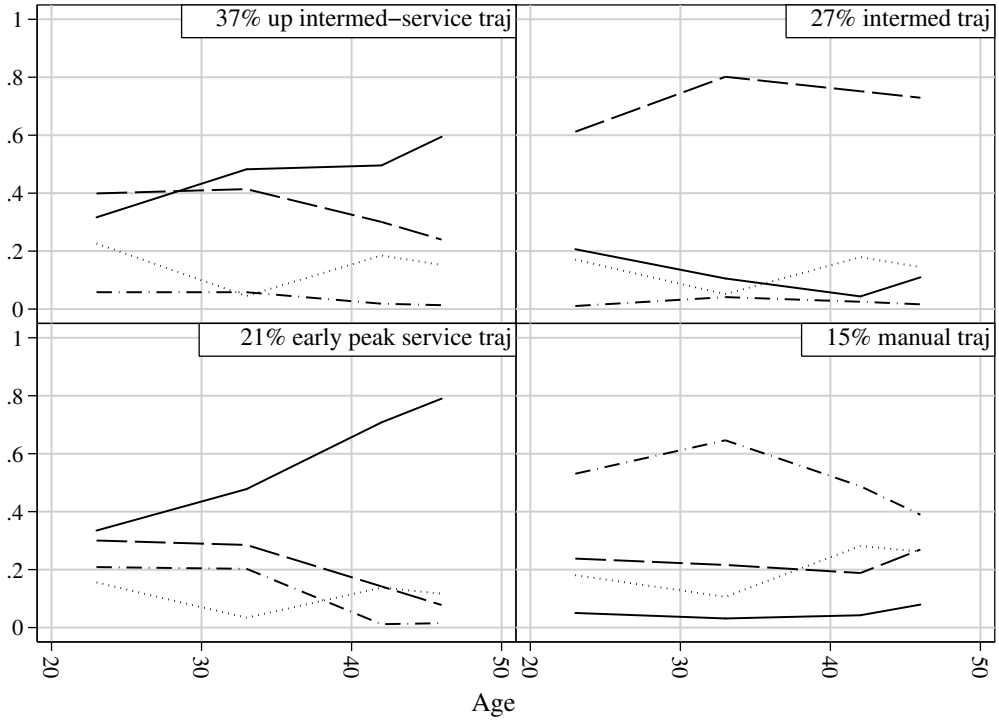

Figure 2: Latent trajectory groups of female cohort members of the NCDS up to age 46. Solid: service class, long dash: intermediate class, dash-dot: manual class, dot: out of the labour force.

the proportion of the service class and the upward mobility experience of the manual class are together the distinguishing mark of this trajectory compared to the first trajectory.

The last trajectory group is associated with the manual class trajectory as this is the predominant social class over the entire period. Its dominance is clearly reduced towards the end especially by the increase of the intermediate class, however the initial order is still maintained.

Although out of labour market status is unremarkable in the case of male trajectories, here this is clearly significant. Entry and exit into and out of the labour market for all trajectories and throughout the entire period is transparently remarkable (look at the dots in the four panels). This is one prima-facie evidence that the method is capable of capturing what is com-

monly understood: women's participation in the labour market, compared to men's, is significant particularly in its entry and exit boeri-etal2005. This flux is characterised by late entry into the labour market, high engagement by early 30s, followed by loosening engagement agan by their early 40s (perhaps for maternity purposes), and finally a re-engagement with the labour market again past their mid 40s.

In Table 5 we see the effects of time varying factors on the rate and direction of the latent trajectories. The overall trend is upward mobility though only to a very small degree. Education is clearly very important for this upward mobility. This effect is felt more among women than men if we recall the companion table for men above.

Table 5: varying coefficients of latent trajectories (equivalent to Figure 2)

Trajectories	Upward intermed-service	Intermed	Early peak service	Manual	p
Size	37%	12%	21%	15%	
Social class of origin					
Age	-0.261	-0.311	-0.214	-0.282	< 0.001
Age^2	0.004	0.004	0.004	0.004	< 0.001
Education	1.933	0.371	0.186	0.344	< 0.001

6.1 Profiles of latent trajectories: NCDS female cohorts

Having described the different trajectories, we can now look at how far these are socially structured (see Table 6). The service class families manage to put nearly 70% of their daughters into the desirable trajectories of upward intermediate to service and early peak service trajectories (first and third columns). The intermediate class families predominantly put their daughters into the upward intermediate to service as well as stable intermediate trajectories (first two columns). The manual class families manage to put one third of their female offsprings into the upwardly mobile trajectory. This

somewhat surprising result, especially in comparison with their male cohorts, is down to educational achievement. The effect of education for each trajectory groups (eight in all) is positive and range from 0.2 to 0.6, except for this trajectory where the effect is 1.9. These families however put the smallest proportion (one in five) in the most desirable trajectory (early peak service).

Table 6: Where do the families put their daughters into? Profile of latent trajectories of NCDS up to 2004 in terms of social class of origin

Trajectories	Upward intermed-service	Intermed	Early peak service	Manual
Size	37%	12%	21%	15%
Social class of origin				
Service	42%	26%	27%	5%
Intermediate	39%	32%	19%	10%
Manual	33%	26%	19%	23%

As before, we gauge the net effects of merit and origin in putting these daughters into one of the four trajectories and avoiding the other (the reference is the manual trajectory). Table 7 presents the parameter estimates. To begin with, clearly both merit and social origin continue to matter in putting daughters into a desirable trajectory and away from an undesirable trajectory. Although the effect of merit, especially ability is large and education is also important, these have not rendered origin to be insignificant. For instance, daughter of the working class, in competition against daughters of the service class (first row), in attaining the desired early peak service trajectory and avoid the manual trajectory (penultimate column), has the odds ratio of 0.28. A daunting proposition. Staying in the same column, daughter of a service class family in competition against daughter of an intermediate class family to reach the most desirable trajectory (early peak service) against the manual trajectory has twice the chance. More than a fair chance for the lucky daughter.

If the competition (the other daughter) happens to possess a standard deviation increase in ability, though, she can more than make it up (2.21). The magnitudes of ability effect seem to be comparable between male and

female cohorts. Again, as in the case of male cohort, effort, defined as academic motivation, operates in a contrary fashion to that which we might expect. this is striking evidence that social background counts more than educational striving.

Table 7: Origin, merit and trajectories of NCDS female cohorts up to 2004. Odds ratios where the manual trajectory is the reference.

Trajectories	Upward intermed-service	Intermed	Early peak service	p
Origin, reference is service class				< 0.0001
Manual	0.31	0.33	0.28	
Intermediate	0.62	0.74	0.48	
Merit				
Ability	1.91	1.69	2.21	< 0.0001
Effort	0.51	0.68	0.66	< 0.0001

7 Latent trajectories: BCS male cohorts

Having established the core patterns from the 1958 cohort, we are now in a position to turn to changes over time. Both from the point the theoretical and policy point of views, inter-cohort comparison is crucial. From a theoretical perspective, an instance of increasing merit hypothesis is put to the test by Breen and Goldthorpe (2001). The focus on relative increase or decrease of association over two cohorts effectively skirt the issue of what nominal association is deemed meritocratic. Adam Swift persuasively argues that a (smallish) signigicant association between origin and destination may be morally just and justified. From a policy perspective, one can attempt to relate the weakening or strengthening of the associations between the two cohorts to some policy measures or the lack of it. It must be said that such an exercise requires sustained effort in itself; certainly we do not attempt it here.

I now present the results of the same analytical exercise on the BCS1970. We find three latent trajectory groups sufficient to capture the cohort mem-

bers' careers up to the age of 34. The number of trajectory and BIC pairs are as follows: (2; 17,015), (3; 16,754), (4; 16,754). We restrict the quadratic terms or rate of inflexion to be the same across the three groups. This is evidence in support of our earlier suggestion that Sturgis and Sullivan (2008 :76) may have found an inflated number of groups in their five or six latent groups.

Because this cohort members were observed only up to age 34 (versus 46 in the earlier cohort), it is expected that their latent trajectories are fewer in numbers. Figure 3 shows the three trajectories of class careers. The first panel with 47% of the cohort members can be succinctly described as the early service latent trajectory. We have seen something like this alse in the earlier cohort. The second panel with 32% captures those with predominantly manual class careers, hence the name. The last panel is interesting as it shows evidence of upward mobility from the manual class to the intermediate class by mid-30s.

In order to avoid drawing premature conclusion, we show a picture of how far this cohort still need to be observed before simple intragenerational mobility comparison should be made (Figure 4). Results from the earlier cohort, for both male and female samples, strongly suggest that changes happen throughout their period in the labour market. We should expect the same nature of change to be maintained also for this cohort. The empty space can potentially display significant changes yet. Conversely, we run the analysis on the earlier male and female cohorts. We found that in both subgroups there were only three latent trajectories of class careers. Evidence can be provided upon request.

In the next table (Table 8) we present the effect of time varying factors on the rate and direction of the latent trajectories. Again we find that the decision to be flexible is warranted since importantly the trajectories are shown not to follow a linear trend. Education is clearly important in increasing the chance of getting into the service class. There is also evidence of heterogeneity across the latent trajectories with occupational achievement are more responsive to educational achievement among those following the second trajectory compared to those following the first trajectory, for instance.

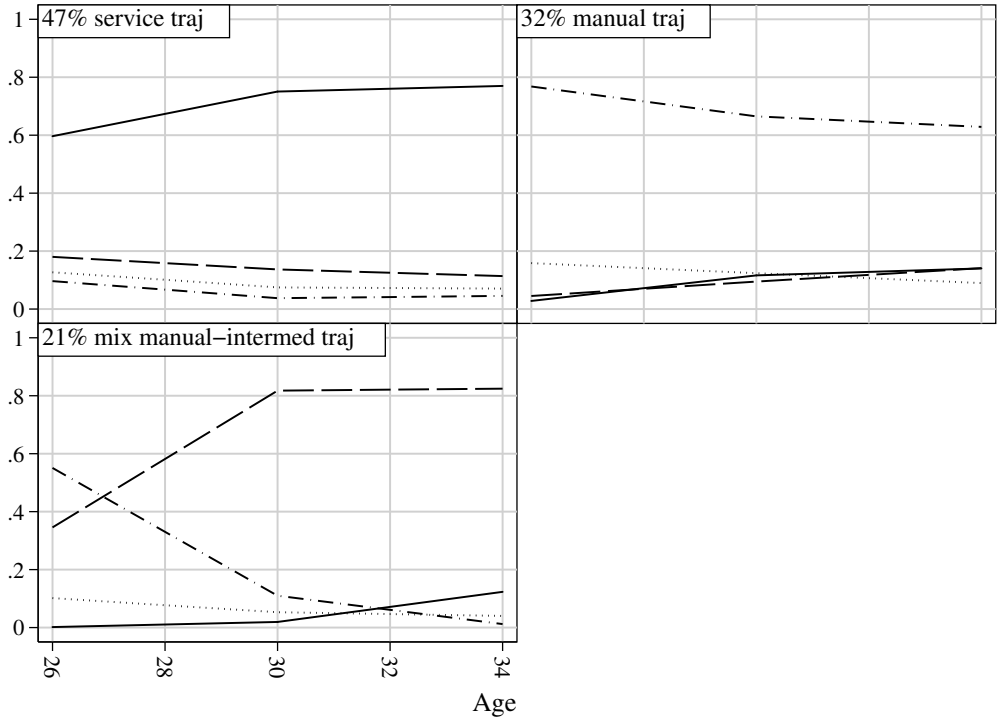

Figure 3: Latent trajectory groups of male cohort members of the BCS up to age 34. Solid: service class, long dash: intermediate class, dash-dot: manual class, dot: out of the labour force.

7.1 Profiles of latent trajectories: BCS male cohorts

Although we expect changes to come and alter these trajectories to a significant degree, we can nevertheless explore how successful families are in putting their sons into desirable trajectories. Little doubt for instance that the first latent trajectories is the most desirable so far. Materials to answer this question is given in Table 9. Two out of three sons of the service families were successfully launched into the service trajectory. Only about one in three sons of the intermediate class ends up in the manual trajectory. One in four, though started in the manual occupations, manages to recover his parent's position. The manual class families send most of their sons onto the manual trajectory although a respectable proportion, one in three, manages to get into the desirable service trajectory.

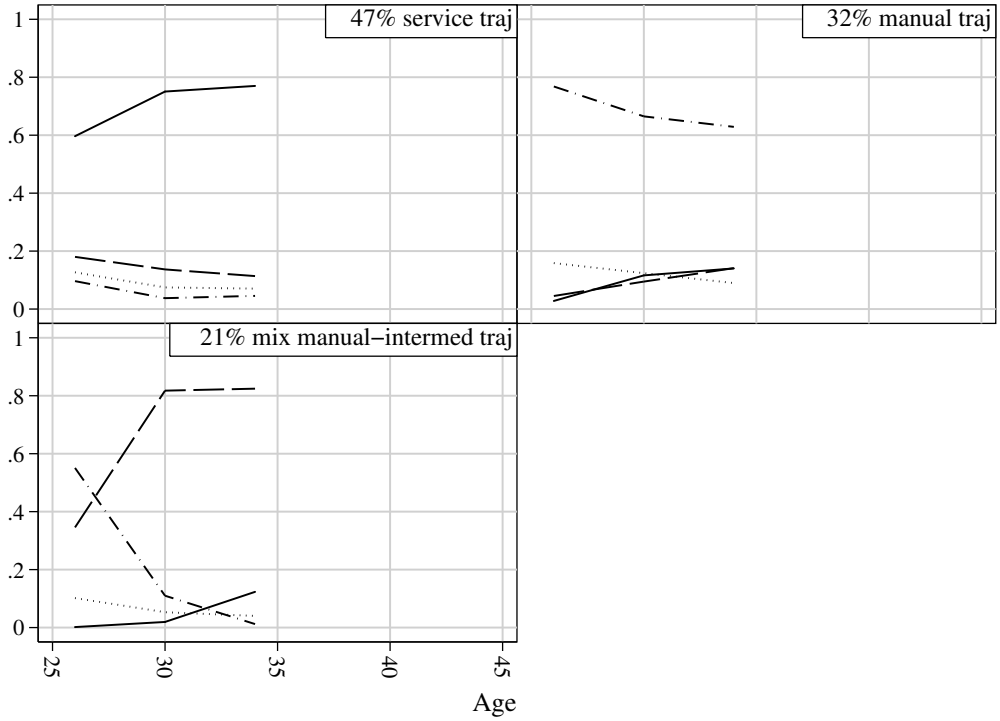

Figure 4: Latent trajectory groups of male cohort members of the BCS up to age 34 and hypothetically to age 45. Solid: service class, long dash: intermediate class, dash-dot: manual class, dot: out of the labour force.

If we compare the trajectories of the NCDS cohort and the BCS cohort, we can get some ideas about the persistence of immobility over slightly more than a decade. This exercise is not straightforward and not comparable to similar exercise in standard social mobility studies such as Breen and Goldthorpe (2001). This is because we use trajectories rather than straightforward destinations. Having noted that we see that service class families of the NCDS cohort managed to put 59 percent of their sons into the desirable early peak service trajectory which comprises 40 percent of the sample; i.e. 24 percent of the total. Nearly comparable figure for the BCS cohort comes from the service class families who managed to put 66 percent of their sons into the desirable service trajectory which comprises 47 percent of the sample; i.e. 31 percent of the total. In addition to the well known finding that

Table 8: Time varying coefficients of latent trajectories (equivalent to Figure 3)

Variable	Service	Manual	Upward manual-intermed	p
Size	47%	32%	21%	
Social class of origin				
Age	0.987	1.046	1.368	< 0.001
Age^2	-0.015	-0.153	-0.153	< 0.001
Education	0.576	0.693	0.849	< 0.001

Table 9: Where do the families put their sons into? Profile of latent trajectories of BCS1970 up to 2004 in terms of social class of origin

Trajectories	Service	Manual	Upward manual-intermed
Size	47%	32%	21%
Social class of origin			
Service	66%	20%	14%
Intermediate	46%	30%	25%
Manual	34%	43%	23%

the service families of the most recent cohort managed to put their offspring to the service class occupations, we also find that based on these two figures, these offspring are put into a springboard that is likely to maintain them in that position for a span of career.

Table 10 is very interesting in showing that ability plays little role in affecting latent trajectories, and that class is much more important. This is evidence that class may be becoming more important in shaping mobility for younger generations, possibly reflecting the changing nature of the labour market from the 1980s. Ability also continues to have similar counter intuitive coefficients.

Table 10: Origin, merit and trajectories of BCS male cohorts up to 2004. Odds ratios where the upward manual-intermediate trajectory is the reference.

Trajectories	Service	Manual	p
Origin, reference is service class			< 0.0001
Manual	0.33	1.25	
Intermediate	0.39	0.79	
Merit			
Ability	1.14	1.08	0.18
Effort	0.70	0.97	0.11

8 Latent trajectories: BCS female cohorts

Similar to their male cohorts trajectories, BCS female cohorts' trajectories can be grouped into three latent trajectories as shown in Figure 5. The number of trajectories and their BICs are as follows: (2; 15,297), (3; 14,775), (4; 14,793) and (5; 14,817). Unlike that of their male counterpart however, the latent trajectories are different. To begin with, there are significant majorities who stayed out of the labour market in those three trajectories. On this point, they superficially similar to the females of the earlier cohort. It is superficial because the disengagement here seems to be less varied over time. The dotted lines are stable during the period for the three panels in Figure 5.

Panel one shows that more than half of the females follow the service trajectory. There is a hint of upward mobility from the intermediate class (dashed line) to the service class. Nearly one in three follow the predominantly intermediate trajectory; those in this latent trajectory have stable career throughout. The smallest group of 16% displays an upward from manual trajectory towards either intermediate and service class careers. There is also however a hint of more significant exit from the labour market.

In summary, there are few latent trajectories followed by the female cohort of 1970 with significant difference in their patterns of intragenerational mobility compared to their male counterpart they grew up with. Again I go

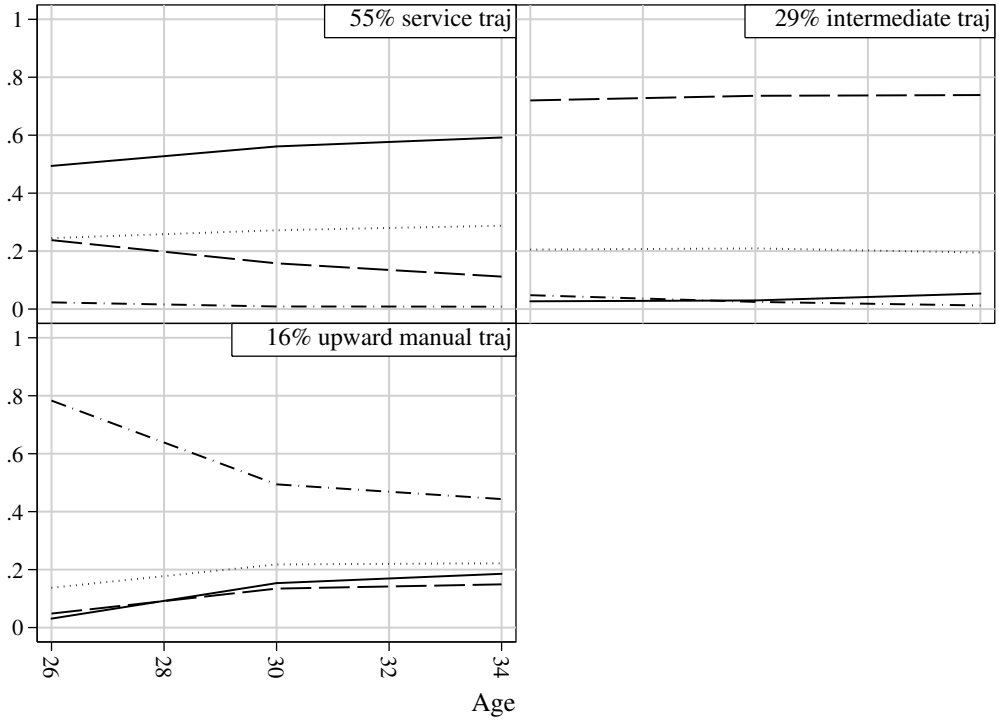

Figure 5: Latent trajectory groups of female cohort members of the BCS up to age 34. Solid: service class, long dash: intermediate class, dash-dot: manual class, dot: out of the labour force.

on to present the effect of age and education on the rate and direction of the latent trajectories in Table 11. By now, we expect to find non-linearity in the social class career of the female cohort and the evidence for that is presented in the next table. Face validity of the decision to allow for non-linear trend is apparent here in terms of the p values. With small number of repeated observations, the squared coefficient of age is significant only at 1.2 percent. The same coefficient in the other trajectories are more significant than this. Education remains important in increasing the chance of getting into the service class; and remains heterogeneous across the different trajectories.

Table 11: Time varying coefficients of latent trajectories (equivalent to Figure 4)

Trajectories	Service	Intermediate	Upward manual-intermed	p
Size	55%	29%	16%	
Social class of origin				
Age	0.007	-1.061	1.415	0.008
Age^2	0.001	0.020	-0.021	0.012
Education	0.663	1.156	0.505	< 0.001

8.1 Profile of latent trajectories: BCS female cohorts

I follow this by asking the question about the family origins of those who follow these trajectories. From Table 12 we see that the service families tend succeed in putting two out of three of their daughters into the service trajectory. So far, one cannot see much difference in the success of the intermediate face-to-face with the manual class families in putting their daughters into any one of the three trajectories.

Table 12: Where do the families put their daughters into? Profile of latent trajectories of BCS1970 up to 2004 in terms of social class of origin

Trajectories	Service	Intermediate	Upward manual-intermed
Size	55%	29%	16%
Social class of origin			
Service	68%	22%	10%
Intermediate	51%	33%	17%
Manual	48%	32%	20%

Moving on to gauge multiple factors that could potentially ensure these daughters desirable trajectories, I present the results in Table 13. As could be expected from the discussion on Table 12 above here we see that the odds of success of manual class daughters in competition against daughters of the service class is small when both aim for the service trajectory and avoid the

upward manual-intermediate trajectory. Above I alluded to the fact that apparently we cannot differentiate between daughters of the manual class from those of the intermediate class. We can tell a lot more here since there is a significant difference between them as evident from the second column. Daughters of the intermediate class can nearly hold their own (0.91) or nearly on par (1) face-to-face with daughters of the service class when aiming for the intermediate trajectory and avoid the upward manual-intermediate trajectory. The daughters of the manual class in the same setting cannot be so successful (0.72). We see that ability and merit are much less important than are social class.

Table 13: Origin, merit and trajectories of BCS female cohorts up to 2004. Odds ratios where the upward manual-intermediate trajectory is the reference.

Trajectories	Service	Intermediate	p
Origin, reference is service class			< 0.0001
Manual	0.40	0.72	
Intermediate	0.49	0.91	
Merit			
Ability	1.01	1.07	0.71
Effort	0.97	1.21	0.55

9 Conclusion

We have seen above four dynamic patterns of intragenerational mobility of the male subset of the first cohort members. These males have been observed in the labour market and their social class attainments recorded four times over 23 years. To comment on the major concern of social mobility research, I find that social class of origin does matter in putting these sons into one trajectory over another. By assessing the 'stations' or social class destinations visited along these different trajectories we find trajectories which contradict the assertion of stability beyond certain age in the life cycle of these cohort

members. More over this later instabilities are desirable for some and less so for others.

Results for female cohort members of the first cohort present equally complex dynamics and substantially related to social class of origin. Though the exact dynamics are obviously different, e.g. due to women's lower observed attachment to the labour market such that some service class women left the labour market altogether for instance, the assertion of stability beyond a point is also refuted by the evidence for this subset. For the BCS male cohort members the evidence presented is consistent with a decline in heterogeneity or more limited patterns of intragenerational dynamics relative to the first cohort. Moreover, it is also apparent that the early stage (age 20s) changes which were observed for the first cohort are not evident in this second cohort. Echoing the finding on the first cohort, however, we have evidence of the continuing effect of social class of origin on the chance of following one trajectory over another.

Female cohort members of the BCS cohort also follow multiple trajectory groups, though again less numerous than those followed by the first cohort. Thus their dynamics are different from those of their fellow cohort members and also different from those of the earlier females. What remains similar to both anchors is the continuing relevance of social class of origins in determining which path is eventually taken up. This is the first time latent inter-generational and intra-generational social mobility are examined simultaneously with a view towards contributing to the enduring concern about the persistent role of origin. I do so while at the same time extending the concern to the span of people's career thanks to novel method of latent class growth model which is applied with some care especially preserving the analytical distinction between origin and destination.

This experience in successfully applying this novel method however also presents some methodological lessons in addition to honing the analytical sensibilities used above. Fitting the model to these four groups (male and female, NCDS and BCS) is never easy since local maxima are always a constant threat. I employ random starting values generously although one can never be sure of finding global optima. Our confidence rests on the principled

and analytical process we employe in this study. This is probably an instance where tackling all four groups systematically makes a lot of sense since problems hidden in one sub-sample (say male NCDS) may resurface later. The solution can be refined and reapplied to all sub-groups iteratively. This also increases confidence in the results since I find various circumstantial evidence or evidence which possess face validity such as the relatively more important role of out of the labour market status for female sub-groups, or the smaller number of latent trajectories of the BCS cohort, relative to the NCDS cohort and relative to those found by Sturgis and Sullivan (2008).

Two points of limitation are in order. First, robustness may be an issue since some time we find marked change in the size of the coefficients when more latent class is attempted. This robustness issue is not uncommon however as for instance reported by Yamaguchi (2008). Certainly the service trajectories across the different cohorts and gender samples are very robust. Second, our experience with latent class analysis in other settings may be valuable in raising caution of the possibility of latent class inflation due to local dependency or direct item function (Tampubolon, 2008b,a).

Scholars studying social mobility stand at an opportune time. Relationship between origin and destination continue to pose intellectual challenge partly in terms of the extension of destination to work life (intra-generation) destinations. This relationship remains an issue of public policy because of its social justice implication. Moreover, novel methods of longitudinal or growth analysis could potentially tease out the strands that make up the enduring relationship between origin and destination. Lastly, and equally importantly, the year 2008 marks the latest wave of survey of the NCDS and BCS. I plan to extend this study to cover the new wave. The NCDS cohort will reach the age of 50 or early old age. It would be very important to probe for the first time to examine 'how long the arm of origin is.' And the BCS cohort will reach the age of 38 which will allow us to replicate the finding about the 'mature stage' of class career which has been put into serious question here. Based on the analysis so far, I can venture out a guess that for the BCS cohort, a marked divergence will be observed to the extent that more than three latent trajectories will be observed. However, social pro-

cesses will persist over the simple law of combinatorics so that the number of latent trajectories will not be as numerous as to render sociological insights superfluous.

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