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From Ascription to Achievement? Origins, Education and Entry to the Labour Force in the Republic of Ireland during the Twentieth Century

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ABSTRACT

This paper examines the relationship between class of origin, educational attainment, and class of entry to the labour force, in three cohorts of men in the Republic of Ireland using data collected in 1987. The three cohorts comprise men born (i) before 1936; (ii) between 1936 and 1949; and (iii) between 1950 and 1962. The paper assesses the degree of change over the three cohorts in respect of (a) the gross relationship between origins and entry class; (b) the partial effect (controlling for education) of origin class on entry class; (c) the partial effect of education (controlling for origins) on class of entry. In broad terms the liberal theory of industrialism would imply a movement, over the three cohorts, towards (a) increasing social fluidity; (b) a weakening of the partial effect of origin class; (c) a strengthening of the partial effect of education. These latter two trends should be particularly noticeable in the youngest cohort, which would, to some degree, have benefitted from the introduction of free post-primary education in Ireland in 1967.

Our results provide almost no support for these hypotheses. We find that patterns of social fluidity in the origin/entry relationship remain unchanged over the cohorts. The partial effect of class remains relatively constant; and, while the partial effect of education on entry class changes over the cohorts, the most striking result in this area is the declining returns to higher levels of education. While the average level of educational attainment increased over the three cohorts, the advantages accruing to the possession of higher levels of education simultaneously diminished. Taken together our results suggest that, in Ireland, those classes which have historically enjoyed advantages in access to more desirable entry positions in the labour market have been remarkably adept at retaining their advantages during the course of industrialization and through the various educational and other labour market changes that have accompanied this process.

FROM ASCRIPTION TO ACHIEVEMENT? ORIGINS, EDUCATION AND ENTRY TO THE LABOUR FORCE IN THE REPUBLIC OF IRELAND DURING THE TWENTIETH CENTURY

I INTRODUCTION

In this paper we focus on educational attainment and class of origin and their relationship with class of entry to the labour force among men in the Republic of Ireland. Our analysis, which uses mobility data collected in 1987, takes the form of an examination of this relationship in three age cohorts of men, who entered the labour force over the approximate period 1936 to 1982.

Our analysis assesses the extent and direction of changes in the relationship between origin class, educational attainment and entry class over the period. The purpose of this is to test whether or not these changes provide support for either of two general approaches concerning the impact of industrialization on mobility. Broadly speaking, the first of these approaches points to a weakening of the origin class/ entry class relationship and a strengthening of the educational qualifications/ entry class link, as society becomes increasingly meritocratic and achievement based in its allocation of individuals to positions. These hypotheses derive, of course, from the liberal theory of industrialism which argues that such trends are functional necessities of industrial development. The second approach, while it accepts the increasing role of education in allocating people to positions, argues that education is not the sole factor which plays this role and, further, that there may be at most only a very modest change in the origin class/ entry class relationship, and that the direction of such change will be indeterminate. In contrast to the liberal theory, then, this approach draws attention to the ability of those in positions of power and privilege to maintain their position against encroachment by outsiders, even in the face of the functional requirements of industrial society and specific state policies which might threaten them (Goldthorpe 1985).

The Irish case presents a particularly useful test of these competing theories since Irish industrialization has been both recent (starting the in late 1950s) and rapid, and many of the welfare and other policies that have accompanied this process are of similarly recent provenance (for example, the introduction of free secondary education in 1967). Since our data span the period of industrialization (in contrast to previous Irish mobility data sets which were collected in the late 1960s/ early 1970s: see Hout 1989; Whelan and Whelan 1984) they allow competing hypotheses about the changes consequent on industrialization to be subjected to empirical test.

The paper proceeds as follows. In the next section we discuss our data and variables. Section three formulates our specific alternative hypotheses in the light of the Irish experience of industrialization and sets out the steps in our approach to modelling our data. In section four we report our results and section five concludes the paper with an assessment of the significance of our results for the rival theories we have outlined.

II DATA AND VARIABLES

The data we use in this paper were collected by The Economic and Social Research Institute, Dublin, as part of its Survey of Income and Life-Style. In total this survey collected data on 3294 households - 6764 individuals in all. The data we use comprise a nationally representative sample of 1956 men in the labour force aged between 25 and 65 at the survey date.

We code our origin and entry class variables using the 7-category version of the Goldthorpe class classification employed in the CASMIN study (Erikson and Goldthorpe 1992). Thus our seven classes are

I+II: service class:

III: routine non-manual;

IVa+b: petty bourgeoisie:

IVc: farmers;

V+VI: skilled manual workers and lower grade technicians and supervisors;

VIIa: non-skilled workers not in agriculture;

VIIb: agricultural labourers.

We define class of entry to the labour force in terms of the first job held after the completion of full-time education. Our three age cohorts are defined as follows:

cohort 1: those men in our sample born between 1922 and 1936 (who would, therefore, have entered the labour force between 1936 and 1956);

cohort 2: those men in our sample born between 1937 and 1949;

cohort 3: those men in our sample born between 1950 and 1962 (who would therefore have entered the labour force no earlier than about 1965).

Finally, our educational qualification categorization defines four levels of qualification as follows:

- 1. primary certificate (the examination taken at the end of primary education²) or no qualifications;
- 2. Group Certificate or Intermediate Certificate or equivalent. The Group and Intermediate Certificate exams are taken at the end of the junior cycle of post-primary education (usually between the ages of 14 and 16);
- 3. Leaving Certificate or equivalent. The Leaving Certificate is the terminal post-primary (second level) education examination, usually taken at age 17 or 18;
- 4. Any post-second level qualification (at sub-degree, primary degree or higher degree level).

III IRELAND AND THEORIES OF INDUSTRIALIZATION

When the Republic of Ireland gained independence from the United Kingdom it was, in the words of one commentator, 'as if Scotland had obtained self-government with Glasgow and the Clyde left out' (O'Brien 1962: 11). The reason for this was that the partition of the

¹ The sample cohort sizes are 584, 647 and 725 respectively.

² This exam was abolished in 1972.

island of Ireland under the terms of the 1921 Anglo-Irish treaty resulted in the six north-eastern counties, in which the bulk of Irish industry was located, remaining part of the UK. The Republic of Ireland was, as a result, overwhelmingly an agricultural society: in 1926 agriculture accounted for around three-quarters of Irish exports. During the period between about 1930 and the mid-1950s, attempts were made by the state to develop indigenous industry behind protectionist barriers, but this policy was largely unsuccessful. Even in 1961 agriculture still accounted for almost two-thirds of exports from Ireland. In the mid-1950s, however, industrial policy underwent a sea change. Protectionism was replaced by free trade, as part of a package of incentives to attract multi-national corporations to Ireland. This policy, which continues to the present, has been conspicuously more successful in industrializing Ireland. By the late 1980s for example, agriculture accounted for just under one-third of Irish exports.

In its train industrialization swept a wave of change through Irish society (Breen et. al. 1990). From our point of view the most significant changes were twofold. First was the decline in the importance of inheritance as a means of acquiring a position in Ireland. Over one-half of the cohort of men aged 15-19 in the 1920s and who did not emigrate could depend upon family employment that would lead to the inheritance of the family business or farm. By the 1970s, for the cohort of men aged 15-19, this was true of less than 15 per cent (Breen et al. 1990: 56).

Second, was the growth in the importance of educational qualifications as a means of acquiring a position, and the policy changes that occured in the Irish educational system following the new approach to industrial development. The most significant such change was the introduction, in 1967, of free secondary education. This gave an impetus to the pre-existing growth in educational participation rates in Ireland, such that, at present, over three

quarters of each cohort complete full time post-primary education (to the age of around 17 or 18).

As a late industrializing, semi-peripheral nation, Ireland provides a useful test case for theories that seek to relate social change to economic development. The recency of Irish industrialization means that we have access to data relating to periods both prior and subsequent to the commencement of industrialization in the late 1950s. In this paper our concern is whether such economic changes have had the kind of consequences for the mechanisms of social mobility that the 'liberal theory' of industrialism would seem to imply. These consequences are, at least, two fold. First is the belief that class origins will become less closely linked to class destinations as ascription gives way to achievement. Second is the belief that, primarily, educational (but also other impartially certified) qualifications will increasingly be used to allocate individuals to positions in the occupational and class structure. These developments will occur for two reasons. First, there will be a composition effect as classes which own the means of production and in which inheritance of class position is of paramount importance (notably farmers, the petty-bourgeoisie and the self-employed) decline in number and the number of employees increases. Second, among employees, jobs will increasingly be acquired on the basis of achievement. This, it is argued, is a functional necessity of capitalism. In order to compete with other nations, an economy must ensure that the optimum use is made of its population's abilities: hence the acquisition of position on the grounds of anything other than merit will be sub-optimal from the point of view of the economy's competitive position. In allocating positions on the basis of achievement, educational credentials will come to play a central role. This process is sometimes termed 'expanding universalism' (see, for example, Blau and Duncan 1967: 430).

Perhaps the most obvious critique of the liberal theory is that it takes too simplistic

a view of the extent to which the forces of competition (between national economies in this case) will lead to changes in the processes by which individuals come to occupy their position in society. In particular it neglects the means by which those who occupy positions of relative privilege can maintain them (for themselves and their family) in the face of such 'functional requirements' and the legislation which may accompany them. The work of Olsen (1982), for example, illustrates very well how groups in society can pursue strategies which, while bringing rewards to them, are nevertheless not in the interest of society as a whole. Viewed from this perspective the liberal theory can be accused of both exaggerating the decline in the importance of ascription in the allocation of at least some positions, and of under-emphasising the degree to which education will come to act not simply as a means by which people can be allocated to jobs but as a factor mediating and, to a degree, maintaining, class privileges. In sum, then, this critique suggests much less of a weakening in the link between class origins and class destinations than does the liberal theory.

How might we model these two alternative approaches? In this paper we focus not on final destination class but, rather, on class of entry to the labour force, since, if the liberal theory is correct, this is the point at which the importance of educational credentials will show a particular growth in significance over the process of industrialization. We will examine three sets of relationship involving class of entry to the labour force, and these are shown diagrammatically in figure 1. The first of these is the gross relationship between origin class and entry class (shown in figure 1a): examining how this changes over our three cohorts will allow us to answer the question of whether or not the weakening of the relationship predicted by the liberal theory has, in fact, occured. The second relationship is shown in figure 1b, corresponding to the arrow labelled A. This is the partial effect of educational

Figure 1: Origin, Entry and Education

Figure 1a: Origin and Entry

Figure 1b: Origin, Entry, Education

qualifications controlling for class origins. An examination of this relationship over our three cohorts will allow us to determine the extent to which educational qualifications have become more significant in the competition for more desirable positions on entry to the labour force. Finally, we focus on the partial effect of class of origin, controlling for education. This corresponds to arrow B in figure 1b. According to the liberal theory we should find a decline in the importance of this relationship as educational/ achievement based criteria grow in importance in determining the position in which an individual enters the labour force.

We are interested, then, in trends over our three cohorts in these three relationships. In the Irish case we anticipate - if the liberal theory is correct - a weakening in both the gross and partial origin/entry relationships, and a strengthening of the partial education effect. We expect this to be most noticeable in a comparison of cohort three with the rest, since it is men of this youngest cohort who will have had the opportunity of free post-primary education and who will have entered the labour force some time after the commencement of

industrialization. 3

Our modelling strategy is as follows. We begin by examining the gross origin/entry relationship, and, specifically we test:

- 1.1 a common, generic model of the origin/entry relationship applied to each of the three cohorts:
- 1.2 for change in the parameters of this model over the three cohorts.

We then turn to an examination of partial effects by the addition of education to the generic model and we test for change over the three cohorts in

- 2.1 the partial origin class effects, as reflected in this model;
- 2.2 the partial education effects, as reflected in this model.

IV ANALYSIS

IV.1. Gross effects of class of origin on class of entry

Our approach to examining changes in the gross effect of origin class on entry class is, first, to develop a model of this relationship which fits the observed data for each of our cohorts; and, second, to test which, if any, of the model's parameters can be held constant across the cohorts.

The generic model which we specify for this purpose is a variant of the Agriculture - Hierarchy - Property (AHP) model which we have previously used to model the origin/destination relationship in Irish mobility data (Breen and Whelan 1992). This model identifies three kinds of effect shaping the pattern of social fluidity. These are:

³ Although free secondary education was not introduced until 1967, and thus could have directly benefitted only those men born after about 1954, nevertheless there was a growth in post-primary enrollments throughout the 1960s even before the introduction of free education. Thus all the members of our youngest cohort were educated during a time of educational expansion, even if they did benefit from this personally.

- 1. a barrier to entry into the agricultural classes on the part of those originating outside these classes;
- 2. a hierarchical effect, given by the interaction between the desirability of destinations and the resources associated with specific origins;
- 3. a property effect, captured in the greater tendency for immobility among men born into classes which own the means of production and in the greater ease of mobility between those classes than into them.

In addition the model also allows for a generalised level of class inheritance (given by a single parameter applied to the main diagonal of the table) and for the usual origin and destination 'main effect' terms.

In modelling the origin/entry relationship, we specify this AHP model in terms of the following parameters:

INH1: a term for the overall level of class inheritance;

INH2: a term for class inheritance among farmers, over and above the general level of class inheritance;

AGB: a barrier to the entry of outsiders into agricultural occupations;

SLP: a term representing the greater fluidity between classes that own the means of production. This takes the form of a dummy variable having the score zero for all cells except those which represent combinations of different origin and entry classes both of which own the means of production (classes I+II, IVa+b and IVc);

and, finally, a set of row effects which comprise the interaction between dummy variables for each origin class and a scaling of the entry classes according to their desirability. In its turn this measure of desirability is constructed as the first component of a principal component analysis of the following variables:

- the gross mean household income for men in each class;
- the mean score in each class on a 20 item consumption scale;
- the mean percentage of men in each class permanently unable to work due to illness or unemployed at the survey date;

the mean percentage of men in each class having more than primary education.

The resulting variable (which we label Y) can, we believe, plausibly be taken to represent an overall measure of the desirability of classes and of some of the barriers to entry into them (see Breen and Whelan 1992 for a more complete discussion). The desirability scores for the seven destination classes are shown in Table 1. The service class (I+II) is, on this measure, by far the most desirable, followed by the petty-bourgeoisie and routine non-manual classes. Skilled manual workers and farmers lie between these and the least desirable classes - unskilled workers and agricultural labourers.

[TABLE 1 ABOUT HERE]

The model, then (as applied to an I x J table), can be written:

$$\log F_{i,j} = \lambda + \lambda^F + \lambda^S + \lambda^{AGB} + \lambda^{SLP} + \sum_{i=1}^{2} \lambda^{INH_i} + \sum_{i=2}^{I} \beta_i r_i Y$$
 (1)

where $F_{i,j}$ is the expected frequency in the i,j^{th} cell; r_i is the dummy variable for the i^{th} row; and λ^F and λ^S are the row and column main effects. We will usually write this and other models in the abbreviated form

A particular advantage of the measured variable approach in this case is that it allows us to evaluate the 'neo-liberal' hypothesis that meritocracy prevails within the employee sector at the same time as other class positions continue to be filled through inheritance (Jonsson 1989:7).

In our previous applications of the AHP to Irish mobility data we used, in place of the row effects specification, a linear by linear interaction, formed from the variable Y, as above, and a scaling of the origin classes according to a similarly derived measure of resources. In the present paper, however, we replace this latter measure with the set of row dummy variables, so allowing for a more general relationship between each of the origin classes and the desirability of entry classes.⁴

Table 2, panel A, shows that the AHP model is not a significantly poorer fit to the origin / entry class data than the saturated model. In other words, the AHP model captures all the relevant association between origin class and entry class in each cohort.

In testing for change in the parameters of the model over the cohorts it is useful to distinguish between the non-hierarchical resources and barriers, captured in the parameters INH1, INH2, AGB and SLP, and the hierarchical (or vertical mobility) resource / desirability relationship captured in the row effect parameters. Table 2, panel B, shows the results of setting either set of terms of the AHP model to be constant over the four cohorts. A model in which both are constant clearly fits the data. In other words, we can detect no change in social fluidity in the origin/ entry relationship over these three cohorts.

[TABLE 2 ABOUT HERE]

Table 3 shows the parameters of this model. The story that they tell is straightforward. There is a significant tendency for overall class inheritance, but this is particulally strong among farmers, as we might expect. There is a significant advantage in

⁴ We might express this by saying that the use of the row effects in the model allows us to measure generalized effects relating to each specific origin class.

acquiring an entry position in a class which owns the means of production associated with being born into one of the other classes which owns the means of production. The strength of the barrier to movement into agricultural occupations from outside is very clear from these results.

Turning to the hierarchical terms, the rank ordering of origin classes (as given by the row effect parameters) is very similar to the ordering of entry classes in terms of their desirability (as shown in Table 1). The service class is the most advantaged, followed by the petty-bourgeoisie, routine non-manual workers and skilled manual workers/ technicians. The only difference between this rank ordering and that of the desirability of destinations lies in the interchange in the positions of farmers and the unskilled non-farm workers, farmers ranking next to last in the row scores. One reason for this, of course, is that the row-effect parameters are partial effects. They measure the advantages associated with origin classes in gaining access to more desirable entry classes, controlling for processes of class inheritance and allowing for the barrier to entry into agriculture and the advantages linked with the ownership of property. So, for example, while men of farm origins appear to have little in the way of resources for the kind of vertical mobility associated with gaining access to more desirable classes, they do benefit substantially from the non-hierarchical or specific resources of class inheritance and so forth. This is in contrast to men of farm labourer origins, who have little in the way of resources for vertical mobility and, equally, possess none of the advantages linked with the ownership of property.

[TABLE 3 ABOUT HERE]

In summary, our results concerning the gross origin / entry class relationship are:

- 1. a generic model of the origin / entry class relationship the AHP model accounts for social fluidity in each cohort;
- 2. across the three cohorts the processes shaping social fluidity have remained constant. We find no evidence of increasing social fluidity in the relationship between entry class and origin class during the period covered by our cohorts.

IV.2. Partial effects of origins and education

In order to examine the partial effects of both origins and education we begin by analyzing the three way table of origins / education / entry class in each cohort. The results of these analyses are given in Table 4. We begin by fitting the model of all two-way interactions within each cohort, which we write

where R and C are the origin and entry classes, respectively, and E is educational qualification category. As Table 4 shows, this model fits each cohort's data as well as the saturated (RCE) model. ⁵ This model which requires that we include all three two-way interactions terms is what Jonsson (1989) describes as the 'class-society' model. The 'neo-liberal' model would require that an adequate fit be achieved without the RE term. Our next step is to replace the (RC) term with the AHP model. As we should expect, and Table 4, line 2, confirms, this provides as good a fit as the full two-way interaction model. Finally, we replace the term (CE) with a specification of the education / entry relationship as a further row effect (or perhaps we should say a levels effect) model defined as

⁵ Indeed, it over-fits the data, but this is due to the sparsity of frequencies in some parts of these tables, which leads to main effect parameters and some interaction parameters having very large standard errors.

$$\sum_{k=2}^{5} \gamma_k e_k Y$$

In other words, the dummy variable for each educational level (e_k) is multiplied by the desirability scoring of entry classes, Y. We denote this term Ed. Line 3 of Table 4 shows that, although the model involving this term is a significantly poorer fit than the more complete model with the full two-way CE effect in two of the three cohorts, it nevertheless fits the data adequately using the normal likelihood ratio goodness of fit test.

[TABLE 4 ABOUT HERE]

In summary, then, Table 4 shows that, in each of the cohorts, the relationship between origins, education and entry can be modelled using the AHP specification to capture the origin / entry relationship at all levels of education; and the education / entry relationship, for all origin classes, is captured in the interaction between each educational level and the desirability of the entry classes.

Table 5 shows the results of tests of cross-cohort constraints applied to this model. ⁶ Allowing the parameters of the model to vary across all three cohorts yields a deviance of 475.5 on 447 d.f. Constancy of the education effect (Ed) is associated with a significant deviance (14.10 on 6 d.f.) while constancy of the AHP parameters returns a non-significant deviance (25.00 on 20 d.f.). Likewise, tests of the constancy of the constituents of the AHP model suggest that neither the non-hierarchical parameters taken as a group (deviance 15.88 on 8 d.f.) nor the hierarchical row effect parameters (8.10 on 12 d.f.) vary significantly as

⁶ In all the tests that follow we allowed the main effects and all interactions between main effects that did not involve the entry class, to vary over cohorts.

between cohorts. However, when we tested the individual parameters of the AHP specification, we found that SLP showed significant variation across the cohorts (as shown on the last line of Table 5).

[TABLE 5 ABOUT HERE]

The net result, then, is a best fitting model in which the row effects, the inheritance parameters and the agricultural barrier parameters, are not found to vary significantly over cohorts. On the other hand, the education effect and the parameter capturing the advantages accruing to those born in a class which owns the means of production, show significant cross-cohort variation.

Table 6 shows these parameter estimates. INH1 (overall class inheritance), INH2 (inheritance among farmers over and above the overall level) and AGB (the barriers to entry into classes IVc and VIIb) are all significant and are remarkably similar to the values shown in Table 3. In other words, processes of class inheritance and the position of the farm sector vis-a-vis the rest appear to be not only constant over time but also independent of education effects. By contrast, adding the education effects substantially reduces the magnitude of the row effects - although they remain significant for most origin classes. The fact that these row effects continue to be significant, however, does pose something of a puzzle. Since the model controls for education, these row effect parameters must relate to some origin specific resources other than education, or to some process distinct from processes of social fluidity involving class inheritance or (broadly defined) sectoral barriers (as captured in AGB and SLP).

[TABLE 6 ABOUT HERE]

Turning to the parameters of the model which vary over cohorts, SLP (measuring the advantages for access to an entry position owning the means of production accruing to those born into a different class which also owns the means of production) shows a gradual decline over the cohorts, so that in cohorts two and three it is not significantly different from zero.

Finally, the education parameters show a clear trend towards a narrowing of differentials. This can be seen in the coefficient for category 4 (sub-degree level or higher) which falls from 2.4 to 1.7 over the three cohorts. However, within this narrowing of the gap between the top and the bottom there are some shifts in relativities. Notably, the advantages to having the lowest level of qualification (a junior cycle certificate) over having none diminish dramatically over the cohorts, as does the differential between a Leaving Certificate (level 3) and a junior cycle qualification. In contrast the gap between level 4 and the Leaving Certificate remains unchanged.

To summarise the partial effects: the partial effects of class of origin, controlling for education, reflect a constancy in the processes of class inheritance and in the barrier to entry to agriculture: these are all unaffected by education. Controlling for education reduces the magnitude of the row effects, but the fact that, by and large, they remain significant and constant over the cohorts indicates that the resources associated with class origins (controlling for the other effects in the model) which are of value in vertical or hierarchical mobility are not confined to educational attainment (as measured by level of education). The partial advantages linked to ownership of property in gaining access to an entry position in another class which owns property, decline over the three cohorts. Finally, the partial effects of education show a decline over time in the value of education, as measured by the log-odds ratios of access to more, rather than less, desirable class positions as between different levels of education. This decline has, of course, been inversely related to the number attaining these

levels of education: as qualifications become increasingly less scarce so they lose their relative value.

V DISCUSSION AND CONCLUSIONS

In this paper we have analyzed two sets of relationships: the gross relationship between origins and entry class; and the partial relationships between entry class and origins and education, respectively. We now turn to the question of what we can learn about mobility processes in the Republic of Ireland during this century from a comparison of the two sets of findings. The important point to bear in mind in this comparison is that the results shown in Table 3 reveal unchanged patterns of social fluidity across the three cohorts, while Table 6 reveals that this has, nevertheless, occurred in a context of changes in the strength of effect of the components of this social fluidity.

If we compare the row effects in the gross and partial models, it is evident that the generalized mobility resources attached to each origin class (which we modelled using the row effects specification in the gross model) overwhelmingly (but not exclusively) comprise educational qualifications. When we control for education in our partial model, the heterogeneity across origin classes, evident in the gross model, diminishes.

In our gross model, the parameter SLP is constant over cohorts, whereas, in our partial model, it declines in strength. In other words, although ownership of property confers specific advantages in all three cohorts, it appears that such advantages have been increasingly mediated via education.

Finally, we return to the questions that motivated this paper: how have the gross and net relationships we have analyzed changed over the course of this century and what light do these changes shed on rival theories concerning the consequences of industrial development?

Turning to the gross relationship between origins and entry class, we find no indication of increasing openness. Processes of class inheritance, the barrier to entry to agriculture and the advantages attendant on owning the means of production (as captured by SLP) show no signs of having diminished and the distribution of resources between classes which are of value in processes of vertical mobility (attaining a more desirable entry class) have remained unchanged. This latter result is particularly striking, given the substantial expansion in educational provision and overall levels of educational attainment over this period, and particularly in the past 25 years.

Ownership of the means of production continues to be associated with distinct mobility advantages, but the growth in the role of education has meant that some of these advantages have become mediated via education. Our partial effects suggest that this is the case in respect of the advantages captured in the SLP parameter. This provides a useful example of the way in which class advantage can persist in the face of change through the use of new channels of mobility.

The contraction of social classes whose members own the means of production and, in particular, the dramatic decline in agriculture, have substantially reduced the absolute impact of direct inheritance in shaping mobility flows. Within the employee sector educational qualifications are increasingly important in achieving occupational positions. Notwithstanding such structural effects, however, the question still remains as to whether education has become more or less salient as a reproductive mechanism. Over our cohorts the distribution of individuals over the education categories comes to display diminishing variation: and at the same time the variance of the returns to different levels of education has also declined. As Boudon (1974) has discussed, the rational decisions of individuals to acquire more education has had an unforseen (and negative) aggregate effect: higher levels

of educational qualifications have become less valuable over the three cohorts as greater proportions of each cohort have come to acquire them.⁷ Educational credentials have undoubtedly come to play an increasingly important part in the process of recruitment to occupations. However, at the same time, educational level, as measured here, has come to exercise less influence in shaping inequalities in social fluidity. In the final cohort, even though the property effect is increasingly mediated by education, the partial effect of education declines. At the same time the overall inheritance effect, the inheritance effect for farming, the barrier to entry to agriculture and the partial origin effects remain constant across cohorts.⁸

Jonsson (1989:23) raises the question of whether his finding that the influence of educational qualifications on relative mobility chances does not increase over time is a reflection of specific features of Swedish society. Ireland is a society which is radically different from Sweden in terms of, *inter alia*, overall levels of social fluidity, the nature of the labour movement, and the distribution of income, and yet our results provide no support for the argument that industrialisation strengthens the role of education in the reproductive process. Indeed, as in the British case we find a deterioration in the occupational payoff of

There are (at least) two possible measures of the impact of education that may be relevant here. The first is partial odds ratios with respect to education within cohorts: that is, the odds of a man being found in class j rather than j' given educational level k rather than k'; and the second is the partial odds ratios taken across cohorts: that is, the odds of being found in class j rather than j' in cohort l as opposed to cohort l', given educational level k. The first set of odds ratios is a function of the Ed parameters only; and comparisons of this odds ratio across cohorts are similarly functions of these parameters only. However, the second set of odds ratios also depend upon the destination class main effects and their interaction with the cohort dummies. Both measures, however, point unambiguously to a decline in the discriminating power of education as a means of 'allocating' men to different class destinations.

These results are consistent with the finding of Heath *et al.* (1991) that in Britain the partial effects of both social origins and educational qualifications on the log odds of entering the service class decline over time.

educational qualifications. A comparison of the Irish and British cases indicates that such a deterioration can occur in very different economic circumstances. Thus Heath et al. (1991) point to the possibility that in a period of rapid growth and keen competition for labour the strict application of meritocratic principles may not be entirely rational. The Irish case suggests that in circumstances of a substantial excess supply of labour many employers may find it unnecessary, or indeed too costly, to recruit through formal competition; or it may be that where such competition occurs, other qualities (for which employers may previously have believed education to act as a proxy) come into play.

The results of our analysis, however, unlike those reported by Heath *et al.* (1991) for Britain do not point to the increasing importance of luck relative to merit. Rather, attention is directed to the importance of class background influences other than those mediated by property and educational effects; these influences are reflected in the partial inheritance and origin effects which show no sign of declining over time. These results suggest that as the game changes not only are the players most motivated to succeed able to adapt their strategies but the advantages associated with traditional strategies, relating to the use of social networks and specialised knowledge of the labour market, may indeed become relatively more important (Halsey, 1977).9

One qualification which may need to be entered relates to effects which cannot be captured by the set of educational and class categories with which we have operated. Thus it may be that the kind of labour market discriminations that were previously made in the basis of gross educational level are now based on rather finer distinctions - such as those of type, rather than (or in addition to) level of qualifications. Similarly, education may now increasingly influence not only class destination but the risk of unemployment among members of the same class (Breen, 1991), and in cases such as the Irish one, the class destinations of emigrants (Sexton et al., 1991).

Table 1: Desirability scores of entry classes

		CLASS					
	1	2	3	4	5	6	7
P-C score:	1.71	0.47	0.73	-0.47	-0.17	-1.05	-1.10

Table 2: Goodness of fit of AHP model

Panel A: model applied to each cohort

1		COHORT 2 3		
deviance	32.30	33.10	27.84	

df=26, p > .05 in all cases

Panel B: testing for change over cohorts in AHP model

	deviance	df	p
variation across cohorts in:			
1. main effects only	29.02	20	> .05
2. 1 plus INH1, INH2, AGB, SLP	17.82	12	> .05
3. 1 plus row effects	16.32	8	> .05

Table 3: AHP model parameters (constant over cohorts)

estimate	standard error	parameter
0.5130	0.08	INH1
3.659	0.38	INH2
0.4486	0.17	SLP
-1.501	0.37	AGB
row effects:		
-0.7861	0.13	ROW(2)
-0.3767	0.15	ROW(3)
-1.126	0.12	ROW(4)
-0.8251	0.11	ROW(5)
-1.019	0.12	ROW(6)
-1.396	0.16	ROW(7)

Table 4: Goodness of fit of models applied to 3-way table in each cohort

	COHORT			
	df	1	2	3
model:				
(RC) (RE) (EC)	108	104.03	92.23	102.21
(AHP) (RE) (EC)	134	135.65	119.20	131.46
(AHP) (RE) (C) (Ed)	149	165.02	144.34	166.14

Table 5: Testing for change over cohorts in the origin / education / entry relationship

	deviance	df	
(AHP) (RE) (C) (Ed) all varying by cohort	475.5	447	
tests (against the above model) of constancy over cohorts of:			
(AHP) (Ed)	25.00 14.10	20 6	
INH1, INH2, AGB, SLP	15.88	8	
Row effects	8.10	12	
Row effects plus INH1, INH2 and AGB	18.35	18	

Table 6: Parameter estimates of final model (asymptotic standard errors in parentheses)

A. Parameters constant over cohorts

INH1 0.562 (0.08) INH2 3.659 (0.39) AGB -1.469 (0.38)

Row effects:

2 3 4 5 6 7 -0.400 0.055 -0.566 -0.271 -0.257 -0.599 (0.16) (0.18) (0.15) (0.13) (0.15) (0.19)

B. Parameters varying over cohorts

COHORTS 3 1 1.018 0.392 0.112+ SLP (0.32) (0.26) (0.23) Education effects: level 0.921 0.685 0.444+ 2 (0.18) (0.15) (0.12)1.890 1.789 1.067+ 3 (0.25) (0.21) (0.13) 2.413 2.339 1.682+ 4 (0.28) (0.23) (0.16)

⁺ indicates significantly different from coefficient in cohort 1 (p < .05)

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