ECONOMIC CHANGE, SOCIAL MOBILITY AND MERITOCRACY: REFLECTIONS ON THE IRISH EXPERIENCE

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1. Introduction

1. A striking divergence can be observed in the interpretations that economists and sociologists have offered of the consequences of economic change in Ireland. Economists' accounts have been broadly sanguine and consensual, despite differences about the balance to be struck between long-run convergence and 'economic miracle' arguments.¹ In contrast, the predominant sociological view has been that globalisation, as typified in recent Irish economic development, fuels economic inequality. From this "radical perspective" the benefits of the 'Celtic Tiger' are largely illusory and a focus on conventional economic indicators conceals a picture of increased inequality, erosion of employment security and marginalisation.² Kirby (2002) concludes that levels of income inequality have increased with higher levels of economic growth and the overall upgrading of Ireland's class structure, involving a substantial expansion of the professional and managerial class, masks a persistent and deepening problem of marginalisation and blocked mobility.3

In this paper we focus on inequality of opportunity rather than inequality of condition. In colloquial terms, we are less interested in the gap between rich and poor than in the opportunity to rise from rags to riches. In sociology such opportunities are part of "social mobility" research where mobility is usually measured in terms of movement between social classes and in particular, the extent to which children equal or surpass the social class of their parents. The definition of class used is obviously of great importance. In this paper we use a definition and measure that is widely accepted in

¹ See Honohan and Walsh (2002) and Blanchard (2002).

² See Allen (2003); O'Hearn (2000 and 2002); Kirby (2002).

³ See Kirby (2002), p. 60 and pp. 172-3).

sociological research – the Erikson/Goldthorpe schema (Erikson and Goldthorpe, 1992) which utilises the basic distinction between employers and employees and among employees, the employment relationship that prevails since the latter has implications for the level of pay, promotion and fringe benefits and the stability of employment. (For more detail see Section 3). Table 1 shows the class schema and change in the size of these classes since 1973. Structural change has been quite extensive in Ireland.

Table 1: Erikson/Goldthorpe Soci	al Classes and Change in Irish Class Sizes
1973-2000	

		1973	1987	1994	2000
		%	%	%	%
1	Professional and Managerial	12.9	17.1	22.0	23.3
2	Routine non-manual	8.3	10.2	17.4	14.1
3	Self-Employed	8.2	7.3	8.1	9.9
4	Farmers	20.0	10.1	9.0	8.2
5	Skilled manual workers, lower grade technicians and supervisors	19.4	27.6	23.6	25.3
6	Semi and unskilled workers not in agriculture	24.1	24.3	17.2	16.6
7	Agricultural labourers	7.2	3.4	2.8	2.6
	Total	100	100	100	100

The level of social mobility in a society is influenced both by the expansion and contraction of particular social classes (what sociologists refer to as *absolute mobility*) and by the extent to which the rules that govern access to desirable positions promote fairness. This latter aspect, which focuses on how *meritocratic* a society is, or has become, falls under the heading of what sociologists describe as *relative mobility*.

In essence relative mobility is concerned with what you know rather than who you know whereas absolute mobility is concerned with the changing structural context. These issues are related but distinct. It is possible for major economic change to create opportunities for large-scale upward mobility without any reduction in the class bias associated with the principles underlying the allocation of positions. For example, the doubling in the number of professional and managerial positions (see Table 1) may mean that more poorer children reach these positions, but their relative probability of doing so may still lag behind that of richer children. Similarly, societies can change in the direction of greater equality of opportunity while the number of positions available at the top of the class structure remains constant.

As we will show in this paper, Ireland has experienced a great deal of social mobility in the last 30 years, but almost all of this mobility (96 per cent) is due to the changing occupational structure and the sheer number of higher class positions available, rather than being due to increasing openness in the way that higher class positions are allocated. Indeed, what is remarkable is the stability in equality of opportunity in the midst of such enormous economic change. However, where change in relative mobility has occurred, it is in the direction of increased openness.

2. Long and Short Run Economic Change in Ireland

Earlier research on social mobility has shown Ireland to be characterised by comparatively low levels of absolute and relative mobility⁴.

Gross opportunities for upward mobility were less than in other European countries and disparities in opportunities between those from more and less favoured backgrounds were wider. Starting from the position of being a society characterised by blocked mobility and the absence of meritocracy, our expectations in relation to trends in Irish social mobility will be influenced both by our understanding of the nature of Irish economic experience and our theoretical expectations regarding the consequences of such developments. As we have already noted, certain sociological accounts have stressed the theme of polarisation during a time of plenty with a consequent exacerbation of the situation in relation to mobility opportunities.

The reality has proved more complex than the rhetoric, as a brief consideration of some relevant trends will show. From 1987 to 1994 there was a marked widening in the dispersion of the earnings distribution, with the ratio of the top to the bottom decile rising from 4.2 to 4.8. However, between 1994 and 1997, as economic growth accelerated rapidly, the bottom of the earnings distribution did not fall behind the median. This is consistent with evidence of the difficulties employers had in retaining labour and the relatively scarce supply of less skilled workers as the labour market tightened. This is what made the introduction of the national minimum wage in April 2000 so smooth. Furthermore, dispersion in the top half of the earnings distribution remained relatively stable with part of the explanation lying in the return of skilled migrants. Thus between 1994 and 1997 the ratio of the top to the bottom decile was essentially unchanged.⁵ In relation to income distribution Nolan and Smeeding (2004) conclude that Ireland remains among the most unequal nation in Europe according to many inequality measures. However, they conclude that recent economic growth has not greatly affected the level of income inequality. Neither the Living in Ireland Survey or the Household Budget Survey indicates the substantial increase in income inequality suggested by many domestic commentators.6 It is true that the overall impact of income tax and social welfare policies disproportionately benefited those towards the top of the distribution, and those households dependent on welfare, although experiencing real gains, saw their relative position deteriorate with an associated increase in relative poverty rates.7 In evaluating trends, we should also keep in mind that the pre-boom starting point is one of a highly unequal society characterised by a liberal welfare state and a history of exporting social problems through emigration of marginalised groups.

⁴ See Whelan *et al.* (1992); Breen and Whelan (1994); Whelan and Layte (2002); Layte and Whelan (2004).

⁵ See Barrett, Fitz Gerald and Nolan (2000 and 2002).

⁶ For evidence of this stability see Nolan and Maître (2000); Nolan (2003); Nolan and Smeeding (2004).

⁷ See Callan and Nolan (2000); Callan, Keeney and Walsh (2002).

Given such an understanding of relevant economic trends in Ireland, what should our expectations be in relation to mobility trends? In the case of absolute mobility or gross opportunities we would expect that Ireland, from a historically low level, would converge towards the European norm. This hypothesis is consistent with the fact that the Irish experience of structural change follows the familiar two phase pattern of change, with the first stage involving a movement from agricultural to industrial society and the second involving the move away from manufacturing toward service industries. In the case of trends in relative mobility or equality of opportunity, it is less easy to establish expectations in the Irish case. One line of sociological reasoning that has been labelled "the logic of industrialism" leads to the expectation that the consequences of increased competition between firms and nations will result in more meritocratic societies. Economic change would not only generate high levels of absolute mobility, through the creation of a new set of professional and managerial positions, but would also transform relative mobility rates because these new positions would be filled on the basis of meritocratic principles.8 This thesis, however, ignores the capacity of those in privileged positions to maintain their relative advantage even in the face of pressures for increased competitiveness. In adopting this later position there is no need to invoke conspiratorial theories. All that is required is that the most advantaged act rationally to use their superior resources to develop strategies that they consider will optimise the prospects for their offspring. The increased use of grind schools and private schools are obvious examples in the Irish case.9

In the context of this debate, Ireland has been recognised for some time as an interesting test case because late and rapid industrialisation allows us examine the process as it unfolds. There are further reasons why the Irish case might prove to be of particular interest. As Breen and Luijkx (2004) notes, the most influential theories of social mobility were developed to account for patterns of mobility in the advanced industrial nations during the so called 'Golden Age of Capitalism' when these countries followed broadly similar trajectories in relation to economic growth, educational reform, welfare state expansion and economic management. Given the emergence in recent decades of more variable trajectories, and in particular a divergence between English speaking countries and others in terms of policies relating to deregulation and extension of market principles, he raises the issue of whether national variations in institutions and polices may have come to have greater consequences for patterns of social mobility. Viewed in this context, an analysis of Irish mobility experience over time offers interesting possibilities.

Turning from theoretical expectations to a review of international research relating to trends in equality of opportunity, we find that the evidence for a clear association between income inequality and

⁸ See Treiman (1970).

⁹ See Erikson and Goldthorpe (1992).

relative social mobility is also empirically weak. Breen and Luijkx (2004) conclude that, while relative mobility opportunities vary across developed societies, no clear relationship is found to economic development or inequality. Understanding the consequences of economic change in Ireland for class mobility and equality of opportunity thus requires detailed empirical study.

The availability of comparable data at four different points in time – 1973, 1987, 1994, 2000 – has recently made such an analysis a practical possibility.¹⁰ In this paper it is our intention to give a non-technical account of such an analysis that has recently been conducted by Whelan and Layte (2004). Our discussion will be restricted to men both because representative data are unavailable for women for 1973 and because the need to restrict such analysis to women who are currently in the labour force creates problems of interpretation rather different from those that apply in the case of men. Our results relate to men aged 20-65 years and those not currently at work are allocated a class position on the basis of their last occupation.

3. Trends in Class Mobility Over Time

L he aim of the class schema we employ, which is a version of the Erikson and Goldthorpe (1992) schema, is to differentiate positions in terms of the employment relations they entail. Basic distinctions are made between employers, self-employed and employees. However, in modern societies the final category is numerically quite preponderant and what is crucial to the class schema is the further level of distinction that is introduced, applying specifically to employees. Following Erikson and Goldtorpe (1992, p. 41) and Goldthorpe (2000, p. 13) the main contrast is between the 'labour contract' typical in the case of manual and lower-grade non-manual workers and the 'service relationship', as expressed in the kind of contract of professional, administrative and managerial staff.

The crucial dimensions along which work is differentiated are the degree of asset specificity involved and ease or difficulty of measuring performance (Goldthorpe, 2000, p. 13). In response to such variation employers offer different forms of employment relations involving different forms of supervision and different reward packages both current and prospective. These two basic forms of regulation of course exist with degrees of modification and in 'mixed' forms (Table 1 shows the schema in full).

The lateness and rapidity of industrialisation in Ireland has been reflected in the transformation of what one might describe as the upgrading of, the class structure. In the early 1970s Ireland was still very much in transition from agricultural to industrial society, whereas by the end of the century it had progressed further towards 'post-industrial society' than many other European nations.¹¹ This provides the structural context within which mobility is observed. This transformation is reflected in changing class origin distributions

¹⁰ The data sources are the 1973 ESRC survey directed by Jon Jackson and 1987, 1994 and 2000 Living in Ireland Surveys.

¹¹ See O'Connell (1999, 2000).

and, more particularly, changing class destination distributions. For both origins and destinations we see reductions in the importance of farmers, agricultural workers and unskilled manual workers and increases in the relative importance of the professional and managerial class, routine non-manual workers and skilled manual workers. The only class to remain relatively stable is the selfemployed. In 1973 property-owning classes accounted for almost half the origin distribution but by 2000 they comprised less than one-in-five of the destination distribution. In contrast, white collar and skilled manual occupations, which made up less than one in three of the origin positions in 1973, accounted for two out of three destination positions by 2000. Between 1973 and 1987 the structural context of changes in mobility patterns was one in which a significant decline in numbers in farming was accommodated by increased opportunities in manual and non-manual work. From 1987 to 2000 the decline in farming was a good deal more modest and change was driven mainly by a substantial increase in non-manual work. These large changes in class structure must inevitably have profound consequences for the patterning of social mobility, as the impact of direct inheritance of property on life-chances diminished and educational qualifications increasingly became a prerequisite of access to the new positions. These findings are entirely consistent with analysis based on Census data. Thus contrary to the claims by authors such as O'Hearn (2000, pp. 78-81) that employment growth has been concentrated in routine low-paying services, O'Connell (2000, pp. 75-76) concludes that there has been a general upgrading in the quality of positions in the labour market. The decline in class immobility resulting from these changes is summarised in Figure 1.

Figure 1: Percentage of Sons Achieving Their Father's Class



The first feature to which we wish to draw attention actually relates to stability rather than to change. For those originating in the professional and managerial class the percentage remaining in this class is constant over time at a level in the mid-fifties. For all other classes there has been a significant reduction in immobility.

Absolute mobility refers to the change in observed rates at a point in time for the population as a whole or for any specific subgroup. It is captured by documenting the percentage outflow from particular class origins to a specified class destination. The most change in such outflows over striking time relates to intergenerational mobility into the professional and managerial class. From Figure 2 we can see that, while the percentage immobile in the professional and managerial class remained constant over time, for all other classes, apart from the self-employed, there was a substantial increase in movement into the professional and managerial class, involving a doubling of the rate for the non-skilled manual and farming classes between 1973 and 2000.

Increased flows to the routine non-manual class were also observed for manual workers and the self-employed and to the skilled manual class for farmers. Over time, consistent with the general upgrading of the class structure, there have been significant changes in the mobility patterns of all origin classes other than the professional and managerial class. There is no evidence that absolute barriers to mobility have risen for groups at the bottom of the class hierarchy. In fact, the opposite is clearly the case. However, such improved mobility prospects are entirely consistent with the persistence of substantial inequalities of opportunity. Thus, even by 2000, those from professional and managerial class origins continued to have four times more chance of access to that class than those originating in the non-skilled manual class. Has such change been a consequence of increased meritocracy, or can it be explained simply by changes in the class structure without any reference to alteration in the underlying pattern of inequalities?



Figure 2: Per Cent Entering the Professional and Managerial Class

To answer this question, we have to go beyond reporting outflow percentages to develop an explicit model of the mobility process. Analysis of relative mobility or equality of opportunity requires a comparison of the chances of those from one versus another class origin being currently located in one rather than another class destination. By cross-tabulating origin and destination classes we create a mobility table that summarises the set of competitions between origin groups differing in resources for class destinations varying in attractiveness. The pattern of association in any such table can be summarised by a set of odds ratios. An odds ratio captures, for any pair of class origins, the chances of being in one rather than another destination. What almost all mobility models have in common is that they take the distribution of class origins and class destinations to be exogenous. That is to say they take the distribution of individuals across the origin and destination distributions as given. The emphasis is then placed on modelling the pattern of frequencies that appear in the body of the table. Because of this, mobility models are essentially concerned with relative rather than absolute mobility.

In log-linear models the association parameters are functions of odds ratios. An odds ratio summarises how unequal the competition is between people from two different class origins for access to a particular pair of destinations. Thus in the "perfect mobility" model, in which destination is independent of origin, all odds ratios are equal to one. The model we employ assumes that relative mobility is shaped by three factors. These are the relative desirability of different class destinations; the resources available to individuals within each origin class which help them gain access to more desirable destinations; and barriers to movement between classes. Barriers to mobility would include inability to accumulate capital and educational and other qualifications needed for entry to the occupations that comprise a class grouping

The model, which takes a log linear form, is operationalised through the use of dummy variables to distinguish between different types of mobility. It includes elements relating to levels of hierarchical movement across the class, membership of property owning classes, barriers to entry to agriculture and residual tendencies towards immobility.¹² Our objective is to develop a parsimonious, and theoretically meaningful model that generates a set of expected frequencies that come as close as possible to the observed frequencies constituted by the cross-tabulation of origins by destinations by time. Applying our model we can compare how well different hypotheses fare according to the criterion of the number of cases misclassified by the expected values derived from that model.¹³

If we make the, fairly unrealistic, assumption that there has been no change in the distribution of individuals across class origins and

¹² For full details see Whelan and Layte (2004).

¹³ Technical details of the models employed in our analysis are provided in the Appendix.

class destinations and the association between origins and destinations are stable over time we misclassify 12 per cent of cases. If we take into account changes in origin and destination distributions, and the increase in absolute mobility associated with such changes, but assume that otherwise inequality of opportunity remains constant over time, we reduce the level of misclassification to 5 per cent. Finally, a model that allows for certain variations in relativities between those from different class origins over time reduces this level to 4 per cent. It is clear that there has been significant change over time.

By applying appropriate statistical techniques we can distinguish between changes in mobility patterns that can be accounted for simply by taking into account variations in the distribution of the population across class origins and destinations and those that require some reference to changes in the underlying principles on the basis of which individuals are allocated to classes. Having done so, we find that 96 per cent of change over time can be attributed to the former, which we label *absolute mobility*, and 4 per cent to the latter, which we term *relative mobility*. This means that the vast bulk of change that has occurred has been driven by the transformation of the class structure and requires no reference to any alteration in the balance of competitive advantage between those from different class origins.

Alongside absolute change we observe broad stability in the pattern of relativities that summarise class advantage. Property effects, associated with self-employment, remain largely unchanged. The significant trends over time were as follows. There was an increased relative inflow from farming to the professional and managerial class. The relative flow from the self-employed to the routine non-manual class also increased. Thus the barriers between the property owning classes and the white-collar classes weakened over time. However, perhaps the most striking change was the significant reduction in the barrier to what we term long-range movement'. This involves movement between the professional and managerial class and the non-skilled manual class. In 1973 the competitive advantage enjoyed by those from professional managerial origins over those from non-skilled manual origins, in gaining access to the former destination and avoiding the latter, was of the order of 7:1. This figure fell to 5.5:1 by 1987 and remained stable between 1987 and 1994. By 2000 it had declined further to 4.2:1 constituting a significant reduction in barriers to long-range mobility.

The general upgrading of the class structure has provided substantially enhanced absolute upward mobility opportunities across the continuum of class origins. In particular, it has offered substantially increased opportunities for mobility into the professional and managerial class for those from manual worker origins. At the same time the underlying pattern of inequality of opportunities has remained relatively stable and the advantages associated with self-employment have remained entirely undiminished. However, the changes that have been observed in relative mobility have been in the direction of increased openness rather than the creation of further barriers. Foremost among these has been an increase in the relative flow between the opposite ends of the class continuum. In what follows we shall focus our efforts on attempting to understand the processes underlying this important change.

4. The Mediating Role of Education

In attempting to understand the factors mediating change in patterns of inequality of opportunity, we seek to determine the extent to which trends over time are driven by changes in the paths of the origin-education-destination (OED) triangle towards a more meritocratic configuration as illustrated in Figure 3. In that figure we show the pattern that should emerge in order to produce a more meritocratic society. First the strength of the relationship between class origins and educational qualifications (OE) should weaken over time. Conversely, the association between educational qualifications (ED) should strengthen over time. Finally, the direct impact of class origins on destination (OD) that is not channelled through education, but rather through factors such as nepotism and social networks and social capital, should weaken.¹⁴ One additional route by which the overall OD relationship might be weakened involves a change in the distribution of education towards higher levels in circumstances where origins have less influence on destinations among the better educated. In that way a structural shift would have the consequence of reducing inequality of opportunity. Despite the rapid expansion of the Irish educational system we could find no evidence for such an effect.





¹⁴ Following Bowles and Gintis (2002, p.5) we may note that any trait that affects access to class destinations and for which parent off-spring association is significant will contribute to intergenerational transmission of outcomes.

The changing relationship between class origins and educational qualifications in Ireland can be illustrated by considering the cases of the professional and managerial and the non-skilled manual worker classes. The main features of such change are fairly straightforward. We observe a dramatic reduction for both classes in the numbers with no qualifications, although significant disparities between classes continue to exist. Thus for the professional and managerial class the relevant figure declines from 11 per cent to 2 per cent while for the non-skilled manual the corresponding figures were 78 per cent and 49 per cent. Despite the dramatic improvement in the situation of the non-skilled manual, their relative chances of acquiring qualifications compared to those from professional and managerial origins actually declined as the latter increased their educational success. This was most pronounced in the proportion gaining third level qualifications. Although the proportion from unskilled manual backgrounds gaining third level qualifications increased from 2 per cent to 10 per cent between 1973 and 2000, the increase for the professional and managerial class was from 4 per cent to 51 per cent.

What happened to the underlying pattern of inequalities in the context of such change? To answer this question we developed a model that assumes that our four educational destinations form an equally spaced hierarchy and estimate the distances between classes in terms of the resource advantages they enjoy.¹⁵ Fitting such a model, and assuming no change over time in the relationship between origins and educational outcomes, leads us to misclassify 6 per cent of the cases. The level of misclassification can be reduced to 3 per cent by taking into account certain specific changes over time that are not captured in our highly parsimonious model. The first of these involved a reduced flow from farming to the no qualifications category. However, by far the most significant change in the pattern of educational advantage involves an increase in the relative strength of the flow from the professional and managerial class to third level. Thus, in a period of rapid educational expansion, there is no evidence of any reduction in the scale of class advantage and one further avenue to increased meritocracy can be eliminated.

Turning to the relationship between educational qualifications and class destinations. We find that the main features of such change are related to the fact that, with an increased availability of higher qualifications goes a reduced capacity of such qualifications to guarantee access to more favoured class positions. This is most vividly illustrated in the case of the Leaving Certificate where the results are set out in Figure 4. Between 1973 and 2000 the number found in the professional and managerial class declined from just over one in two to one in four. In contrast, the number found in skilled manual work increased from one in twelve to one in four.

¹⁵ See Whelan and Layte (2004). This model is known as a row effects model.

Figure 4: Per Cent with Leaving Certificate as Highest Qualification Found in Professional and Managerial and Skilled Manual Classes



In order to examine changes in the underlying pattern of association between educational qualifications and class destinations, we developed a model that again assumes that educational qualifications are equally spaced on an underlying hierarchy, but on this occasion we estimate the distances between class destinations in terms of desirability/barriers to entry. This model leads us to misclassify 7 per cent of cases. The major significant changes over time that are not captured in our simplified model relate to the reduced ability of educational qualifications to guarantee access to more desirable class destinations. Taking into account such effects reduces the number of cases misclassified to 2 per cent. The first such effect captures an increased relative flow from Intermediate Certificate to the routine non-manual and professional and managerial classes. Similarly, it is necessary to allow for a reduced flow from the Leaving Certificate to the professional and managerial class. Finally, we have to take into account an increased flow from third level education to routine non-manual work.

The results of our analysis point to a reduced rather than an increased impact of education. The major contrast is between 1973 and all other years. As we have already seen, as the numbers with higher educational qualifications increased their absolute ability to guarantee access to higher-level positions declined. What our current analysis reveals is that between 1973 and 1987 there was also a significant decline in the relative advantages conferred by higher level educational qualifications as those possessing them no longer constituted a small elite. After 1987 change was a good deal more modest and in fact there is no evidence of any decline in the impact of educational qualifications between 1994 and 2000. However, between 1987 and 1994 the relative advantage in terms of class attainment conferred by educational qualifications, continued to decline.

In interpreting these results there are a couple of caveats that must be entered. First we entirely accept that educational expansion has been one important factor in promoting economic growth in Ireland.¹⁶ Without such expansion we could not expect that the Irish class or occupational structure would have the shape that it does. In that sense expansion of educational opportunity is intimately linked to the increased mobility opportunities. Furthermore, class position remains strongly associated with educational qualifications and investment in education is a perfectly rational choice for the individual. We should also note that it is not possible to derive any conclusions relating to earnings returns to education from the findings we have reported. In relation to the trend between 1987 and 1994 there is need for some further work to reconcile this finding with those relating to the trend in earnings returns to education during this period. Barrett et al. (2000, 2002) focusing on hourly earnings of employees found that returns to third level education increased between 1987 and 1994. However, this return was concentrated among the middle or older age groups, apparently reflecting an increase to experienced skilled work. Our findings of course relate to a somewhat different population of all men aged between 20 and 64 years whether currently in the labour market or not. They also refer to processes unfolding on very different time scales. Thus while the relevant wage relationships are established precisely at the points of observation in 1987 and 1994, the education qualifications/class destination relationship for any two points of time summarise outcomes that have been established over long periods of time. Thus there is no necessary contradiction between the fact that between 1987 and 1994 experienced skilled workers gained from skill shortages and the fact that, particularly between 1973 and 1987 but also between 1987 and 1994, the relative advantages conferred by educational qualifications in gaining access to higher-level class positions declined somewhat. The major conclusion that we wish to draw is that the conventional notion of increased meritocracy, involving a decrease in the origin-education relationship and a strengthening of the education-destination relationship has no relevance in the Irish case.

5. Gross and Net Effects

To explore this issue we need to compare the gross origindestination effects discussed earlier with their net counterparts, having controlled for the role of education. When we make such a comparison we find that, for effects associated with self-employment the difference between gross and net effects are negligible and there is little evidence of change over time. Thus education plays no significant role in mediating such effects and their direct impact has changed little over time. Where education does play a significant role is in reducing the magnitude of the hierarchy effects. Our findings, in this regard, are expressed in terms of odds ratios. An odds ratio is calculated by multiplying a pair of disparity ratios. Thus, for example, we can first calculate the odds of making a transition across

¹⁶ See Fitz Gerald (2000).

generations that does not involve a hierarchical movement, for example from farming to skilled manual work, versus one that does involve such a move, for example from non-skilled manual to routine manual work. We can proceed to calculate the odds of making a transition that involves a movement of three steps across the class hierarchy, for example from non-skilled manual work to the professional managerial class. By dividing one odds by the other we get an odds ratio that summarises the relative likelihood of one type of movement rather than another. The index has the major advantage that it is unaffected by the marginal distributions of the table on which it is calculated and thus permits comparisons over time that capture the degree of inequality of opportunity unaffected by structural change. For short-range and medium-range movements the outcomes are constant across time. The findings relating to longrange moves between the unskilled manual class and the professional and managerial are complicated by change over time.

In Figure 5 we show variation over time for both the gross odds ratios for long-range movement and their net counterparts where we have controlled for the mediating role of education. These figures show how much more likely movements involving no hierarchical mobility are compared to those involving long-range mobility. They thus provide an index of barriers to long-range mobility. In both cases we see a significant reduction in such barriers over time. The gross values decline from 7.04 in 1973 to 4.18 in 2000. For the partial values the corresponding figures are 2.96 and 1.74. This net effect represents restrictions on long-range hierarchical mobility that are mediated by factors other than education and it is clear that it has also declined. If we express the net effect as a percentage of its gross counterpart, we find that the range of values observed is extremely narrow, running from 38 per cent to 42 per cent. Thus over time the extent to which restrictions on long-range mobility operate through educational qualifications, rather than other channels, has remained constant and both processes have diminished in importance.



Figure 5: Gross and Net Odds of Barriers Long Range Moves by Year

6. Conclusions

W hilst there was a gradual transformation of the class structure as Ireland industrialised, the shift from recession and large-scale unemployment throughout the 1980s to boom and labour shortages in the 1990s was a dramatic one. Both these processes contributed to a significant upgrading of the class structure during the period as the number of higher-level occupations increased. In terms of absolute mobility, the general pattern was one of increased opportunity for upward mobility. One of the striking consequences of such changes was increased access to the professional and managerial class across the spectrum of class origins. The vast bulk of the change in social mobility patterns over time was accounted for by changes in absolute mobility, as Ireland converged towards a European norm.

On the other hand, what was striking about developments in relative mobility and equality of opportunity was the extent of stability over time with the advantages enjoyed by the self-employed remaining undiminished and class differentials being preserved intact. Nonetheless, there were some signs of improvement on this front. We observed a reduction in the underlying barriers to longrange mobility and increased flows from the self-employed classes to the white-collar classes. Therefore, whilst equality of opportunity may not have increased dramatically over the long period or during the boom years, we did not see a deterioration in the position of those coming from more disadvantaged social class positions and there is no sign of the general picture propagated by sociologists of blocked mobility and marginalisation.

The changes in relative mobility that were observed cannot be explained by reductions in income inequality nor by policies purposively directed at a reduction of class inequalities. Furthermore, there is no evidence of a general trend towards increased meritocracy, if this is defined as a weakening of the class origin to education relationship and a strengthening of the education to destination relationship. The association between class-origins and education has reduced. Furthermore, there is no evidence of a weaker association between origins-and destinations at higher levels of education of a kind that would lead expansion of participation *per se* to promote increased social fluidity.

Throughout the course of the economic boom Ireland has remained a highly unequal society in terms of the distribution of income. However, contrary to the assumptions and predictions of a number of Irish sociologists, economic change and, in particular, the economic boom of recent years has been associated with substantial absolute social mobility and some increase in equality of opportunity, although it is hard to pinpoint exactly how this has come about at present given other developments in the relationship between the class categories and education. As with explaining the economic boom in Ireland, it is easier to rule out certain interpretations than to provide precise accounts of the mechanisms underlying increased social fluidity. Certainly if there has been a reduction in inequality of opportunity this has been achieved in Ireland without a reduction in key inequalities of condition and this gives raise to a number of questions. While there is no necessary relationship between economic growth and increased equality of opportunity, the pattern of change over time in Ireland suggests that both long-term factors, associated with the upgrading of the class structure, and short-term factors reflected in the tightness of the labour market have played a role.¹⁷ In the absence of empirical studies of employer behaviour with regard to recruitment and promotion, the manner in which change has come about constitutes something of a black box. What is clear though is that there is no necessary reason why resort to criteria other than education should result in increased equality of opportunity. To the extent that such criteria were more strongly associated with class origins than educational qualifications, it could contribute to increased inequality of opportunity. Instead the observed reductions in barriers to long-range mobility indicate that alternative criteria appear to have been applied in a manner that discriminates less against those from the lower reaches of the class hierarchy. In that restricted sense Irish society does seem to have become more meritocratic.

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¹⁷ See Breen and Luijkx (2004).

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APPENDIX: MODELLING SOCIAL MOBILITY

Introduction

A mobility model is essentially a statistical encapsulation of a particular account of the factors that shape the pattern of social mobility. In fact mobility models are most frequently formulated as 'log-linear models' that are a set of techniques for analysing data in the form of contingency tables or cross tabulations. By comparing the expected frequencies generated by our model with the observed frequencies we can assess the "goodness of fit" of our model.

The Agriculture, Hierarchy, Property Model T he model includes the following elements.

Agriculture: AGB: the term reflecting the barrier to movement into agricultural destinations from non-agricultural destinations.

Hierarchy: H1, H2, H3: These terms are intended to capture the effect of generalised resources, desirability and barriers conceptualised in a hierarchical fashion and reflecting the extent of movement between four 'zones' in the class hierarchy.

Property: PB: This term captures the tendency for movement between the farming and petty bourgeois classes.

SLP: the term for movement between petty bourgeois origins and the service class.

$$LogFij = \mu + \lambda O + \lambda D + \lambda AGB + \lambda PB + \lambda SLP + \sum_{i=1}^{3} \lambda^{Hi} + \sum_{i=1}^{5} \lambda^{INHi} + \lambda^{OAF1}$$

Inheritance: The inheritance effects capture tendencies towards immobility over and above those accounted for by other factors in the model.

Where Fij is the expected value in the ijth cell of the table.

The mobility variance is partitioned as follows:

I Model Fits	
Model	G^2
A. No Mobility Differences	988.0
{F}{S}{T}{AHP+OAF1}	
B. Absolute Mobility Differences	263.32
{F*T}{S*T}{AHP+ OAF1}	
C. Absolute and Relative Mobility Differences	213.6
{F*T}{S*T}{AHP+OAF1+OAF2	
+OAF3+INH2*1987/94+	
INH3*1987/94 + H3*T}	
Total Mobility Variance	774.4
II Partitioning of Mobility Variance	
Absolute Mobility Variance per cent	93.6
Relative Mobility Variance per cent	6.4

Table A1: Mobility Variance with the AHP Model

Row and Column Effects Models

In this model the odds of being in the higher of a pair of adjacent destinations rises with increasing distance between the unequally spaced origin classes. Since the destination classes are equally spaced the advantage enjoyed by one origin class over another in a competition for a pair of destinations is also a simple function of the difference in rank ordering of these destination classes. The row effect model specifies that the log odds on a higher status destination, relative to the next lower status destination, changes by a fixed amount for each shift of origins regardless of the pair of destinations being compared (Breen 1984, Hout 1981).

For an I x J table:

$$\log Fij = \lambda + \lambda_i^O + \lambda_j^E + u_i v_j$$

where the $\{v_j\}$ are fixed constants and the $\{u_I\}$ parameters are called row effects.

The column effects model: treats the row variable as ordinal, represented by ordered scores $\{u_I\}$ and the column variable as nominal with unknown parameters. Thus the situation is the obverse of the row effects model; rows are equally spaced and columns unequally. The column effects model specifies that the impact of a higher status educational level, relative to the next lower status origin, changes by a fixed amount for each shift of destination regardless of the pair of origins being compared. The column scores thus reflect the relative importance of superior educational qualifications in competition for access to one rather than another destination class.