Change in Intragenerational Mobility in the Republic of Ireland

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Introduction

THE PRECEDING PAPERS have examined the effect of industrialisation on intergenerational social mobility in the Republic of Ireland. This paper continues the theme by considering one of the processes that goes to make up intergenerational mobility, namely, intragenerational mobility—the mobility of individuals during their lifetimes. The focus throughout much of this book is on the question of how other aspects of a society change when it undergoes industrialisation. It is often found that underlying patterns of social mobility or, in other words, of social fluidity, are very resistant to change, as has been partially borne out by the preceding paper. The question must then be asked: ‘By what mechanisms does change at the level of the occupational structure bring about, or fail to bring about, change at the level of social mobility?’ In an attempt to begin to answer this question, I examine intragenerational mobility as one of the components of intergenerational mobility, and continuous worklife mobility as the process by which the life-time trajectory of intragenerational mobility is actually constructed.

In looking for change in these different aspects of social mobility in mid-twentieth century Ireland, I find no evidence of new patterns of association between classes of origin and destination in inter- or intragenerational mobility, but I do find evidence of change in patterns of continuous work-life mobility. That is, after controlling for changes in class distributions, I find that people are ending up in the same sorts of places as before, but also that—to an extent—they are taking different routes to achieve this.
Under conditions of industrialisation a number of pressures towards change might be expected to affect processes of social mobility. Among these would be greater universalism in social selection, a greater role of education, more bureaucratically directed careers, and so on. But the actual way in which the structural pressure for change will translate into new patterns of social mobility is not deterministic. The conditions change and, as a result, what happens to individuals changes; but people will react to changed conditions with changed strategies. Typically, those with advantage under the old regime will manage to a greater or lesser degree to retain this advantage.

To gain a fuller understanding of this process, it is necessary to treat it at several distinct levels. At the most structural level, the intergenerational relationship between class origins and destinations must be examined. This relationship must be elaborated through an understanding of its component processes; that is, of the link between origin and initial placement in the labour market (and how this is based on inheritance, education, social networks and so on), and in turn of the link between initial placement and ‘mature’ class position. Then finally the continuous processes which bring about the patterned outcomes of the transition from origin to entry (or ‘first’) class and from entry to mature class must be dealt with. In this paper I am exclusively concerned with intragenerational mobility, and attempt to examine the nature and significance of change in both mobility between class at entry to the labour market and mature class (taken to be class at age 35 for practical purposes, and generally referred to hereafter as destination or last class) and continuous mobility between classes throughout the work life (also up to age 35). The focus is on how patterns of association between classes change, once shifts in the overall distributions of class positions are taken into account. Allowing for these shifts, does change occur in the relative ease or difficulty of movement between classes?

As I have mentioned, the underlying patterns of intergenerational social mobility are understood to be relatively resistant to change. Cross-sectional research tends to bear this out, even across countries with substantially different absolute mobility rates (see, for instance, Erikson and Goldthorpe, 1992). Similarly, Breen and Whelan (this volume), show that the change which has taken place in the underlying mobility regime in Ireland between 1973 and 1987, while real, is relatively small. But although the patterns of net association of parent’s class with child’s class tend to be quite similar across many societies, the processes which bring about these patterns can differ substantially. That is, the same origin-destination pattern can be created by a variety of origin-to-first-class and first-class-to-destination-class patterns, since the two components may vary...
to compensate for each other. Thus, the first–last (i.e. entry-class to mature-class) mobility process can be viewed as being constrained by the origin–destination process. But a given first–last pattern can be constituted by different patterns or sequences of work-life mobility. The first–last pattern is built up out of the accumulated steps of ongoing work-life mobility, while also constraining the pattern of these steps, though not absolutely.

These are the sorts of issues this paper seeks to explore. Structural change is expected to bring about change in the processes of social mobility, over and above its direct effect of simply shunting people about; but it is not clear how much change there will be, or what the relationship is between pressures for change in different aspects of mobility. Thus the questions must be asked (i) if change can be seen, and (ii) if yes, of what nature and extent, in both ongoing work-life mobility, and first–last class mobility. Does the structural change of industrialisation cause change in processes of work-life mobility? If so, does the accumulated experience of new patterns of work-life mobility result in new intragenerational mobility outcomes?

Data Sources

The following analysis is based on data from the Irish Mobility Study of 1973–4. This is the only source of comprehensive work-life data for the Republic of Ireland, and, while lacking information on more recent periods, it covers the bulk of the mid-twentieth century. I look at the complete careers, up to age 35, of men in a series of cohorts, and examine how their experience of the work-life career has changed. For modelling purposes, I group the cohorts into three ten-year groups.

The original survey interviewed males aged between 18 and 65, and collected each respondent’s complete work-life history. This gives much more information than I use in the present context, as I discard all information for workers under age 35 at the time of interview, and all information on events after age 35 for those workers older than this at interview. While this entails a substantial loss of information, it allows me to compare the experience of successive birth cohorts. The choice of age 35 in this regard is the result of a trade-off. I feel that there is little point

1 The discussion in this paper focuses exclusively on intragenerational mobility, but it is worth stating at this stage that the modelling techniques used in the body of this paper have also been applied to intergenerational mobility data, and show that there is no evidence of change in the underlying pattern over the relevant period.
Crude Periodisation:

Protectionism  | War  | Short Recovery  | Depression  | Growth  | Interview date

1939  | 1945  | 1951  | 1959  | 1975  |

Self-imposed cutoff at 35

Cohort 1  | Cohort 2  | Cohort 3  | Cohort 4  | Cohort 5  | Cohort 6

Approx. age of Lab Mkt entry


Date

Figure 1. The cohorts in historical context.
in extending the length of career at the expense of number of cohorts, as most mobility will take place before age 35, and further that the addition of extra cohorts at the expense of shorter careers will tend to lose useful information.

The period I can examine is constrained by the available data, which effectively cover from about 1925–30 to 1973. This period can be crudely dichotomised into a period of protectionism and stagnation before the Whittaker Report\(^2\) and one of foreign investment and growth after, but there is rather more detail to the picture in reality. The periodisation I favour, at least for exploratory purposes, begins with (i) the phase of indigenous industrialisation under protection, which was largely a feature of the 1930s, and had reached a plateau well before (ii) the period of austerity and increased isolation of the Second World War. This was followed by (iii) a short period of recovery in the late 1940s, which in turn gave way to (iv) the partially artificially induced depression of the 1950s, before we reach (v) the relatively vigorous growth and innovation of the 1960s.

Figure 1 serves to show how the historical experience of successive birth cohorts differs. It can be seen that the members of cohort 1 entered the labour market well before the Second World War, and spent the later part of their careers, to age 35, during the ‘Emergency’. Cohort 2 has a similar experience, but works through the short post-war recovery as well. Cohorts 3 and 4 enter the labour market, by and large, during the war, and experience both the short recovery and the depression of the 1950s. Cohort 5 enters during the post-war recovery, and then works through both the depression and the boom of the 1960s. Finally, cohort 6 has perhaps the experience with the greatest internal contrast, arriving on the scene at the start of the depression but then enjoying the long subsequent period of growth. If the cohorts are paired, as in some cases becomes necessary to avoid an undue sparsity in the data, some of these distinctions of experience are blurred. Cohorts 1 and 2 have a substantial part of their careers under their belts before the war, but also experience the war. Cohorts 3 and 4 for the most part enter the labour market during wartime, have become established by the short post-war recovery, but spend some time in the slump of the 1950s as well. The final pair, cohorts 5 and 6, combine what appear to be two quite different experiences: cohort 5 enters the labour market during the post-war recovery while cohort 6 enters more or less at the beginning of the slump; but, together, they experience the full duration of the slump and of the 1960s growth period.

\(^2\) The internal Department of Finance report, *Economic Development* by T. K. Whittaker, is seen as marking a turning point in the attitude of government to development and, notionally, as the beginning of modern Irish industrialisation.
The analyses that follow are based on the seven-category version of the Goldthorpe class schema as described in Table 1 of the paper by Whelan, Breen and Whelan, above. The choice of this version of the schema represents a compromise between comprehensiveness and simplicity; it blurs a few interesting distinctions but the data would not allow us to model reliably with a much more disaggregated version.

Looking for Patterns in the Data

Table 1 shows first-to-last class mobility aggregated over the six cohorts. Even with the relatively condensed seven-category class schema, there are a number of zero cells, most notably those representing exit from classes IVab and IVcd, the urban petty bourgeoisie and the farmers. Classes I and II, (generally referred to hereafter as the service class), have markedly high proportions of apparent life-time stability, with only 11 per cent of those who enter the labour market in this class not also being there at age 35. But this is a relatively small class. In contrast, the proprietorial classes (IVab and IVcd), while also retentive, have a much smaller proportion entering as first class (because of the need to wait for inheritance, or to acquire the skills, contacts or capital necessary to set up on one's own etc.), and thus a much smaller population from which to generate outflows to other classes. The industrial working classes (V, VI and VIIa) also hold on to a large proportion of those who enter there, but not to the same extent as the service class or the petty bourgeoisie, while the routine non-manual class (III) seems to be a staging post for mobility. Little more than a third of those entering the labour market in this class are also in it at age 35. Class III sends a lot of its members to the non-agricultural classes, and

<table>
<thead>
<tr>
<th>Entry Class</th>
<th>I-II</th>
<th>III</th>
<th>IVab</th>
<th>IVcd</th>
<th>V-VI</th>
<th>VIIa</th>
<th>VIIb</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-II</td>
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<td>3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td></td>
<td>70</td>
</tr>
<tr>
<td>III</td>
<td>37</td>
<td>51</td>
<td>14</td>
<td>5</td>
<td>14</td>
<td>25</td>
<td>1</td>
<td>147</td>
</tr>
<tr>
<td>IVab</td>
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<td>0</td>
<td>9</td>
</tr>
<tr>
<td>IVcd</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>18</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>19</td>
</tr>
<tr>
<td>V-VI</td>
<td>10</td>
<td>6</td>
<td>29</td>
<td>6</td>
<td>101</td>
<td>35</td>
<td>5</td>
<td>192</td>
</tr>
<tr>
<td>VIIa</td>
<td>15</td>
<td>22</td>
<td>26</td>
<td>10</td>
<td>65</td>
<td>145</td>
<td>11</td>
<td>294</td>
</tr>
<tr>
<td>VIIb</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>186</td>
<td>40</td>
<td>139</td>
<td>223</td>
<td>635</td>
</tr>
<tr>
<td>Total</td>
<td>134</td>
<td>99</td>
<td>99</td>
<td>227</td>
<td>222</td>
<td>346</td>
<td>240</td>
<td>1366</td>
</tr>
</tbody>
</table>
Table 2. All class spells by class of spell and outcome.

<table>
<thead>
<tr>
<th>Class of spell</th>
<th>I-II</th>
<th>III</th>
<th>IVab</th>
<th>IVcd</th>
<th>V-VI</th>
<th>VIIa</th>
<th>VIIb</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-II</td>
<td>126</td>
<td>20</td>
<td>13</td>
<td>2</td>
<td>5</td>
<td>8</td>
<td>0</td>
<td>174</td>
</tr>
<tr>
<td>III</td>
<td>66</td>
<td>68</td>
<td>21</td>
<td>8</td>
<td>33</td>
<td>82</td>
<td>15</td>
<td>293</td>
</tr>
<tr>
<td>IVab</td>
<td>7</td>
<td>1</td>
<td>77</td>
<td>4</td>
<td>20</td>
<td>33</td>
<td>12</td>
<td>154</td>
</tr>
<tr>
<td>IVcd</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>213</td>
<td>1</td>
<td>15</td>
<td>8</td>
<td>239</td>
</tr>
<tr>
<td>V-VI</td>
<td>33</td>
<td>22</td>
<td>66</td>
<td>10</td>
<td>160</td>
<td>173</td>
<td>29</td>
<td>493</td>
</tr>
<tr>
<td>VIIa</td>
<td>20</td>
<td>98</td>
<td>60</td>
<td>38</td>
<td>230</td>
<td>254</td>
<td>175</td>
<td>874</td>
</tr>
<tr>
<td>VIIb</td>
<td>8</td>
<td>24</td>
<td>30</td>
<td>267</td>
<td>62</td>
<td>366</td>
<td>92</td>
<td>849</td>
</tr>
<tr>
<td>Total</td>
<td>261</td>
<td>234</td>
<td>267</td>
<td>542</td>
<td>511</td>
<td>931</td>
<td>331</td>
<td>3076</td>
</tr>
</tbody>
</table>

* Censored spells are on the diagonal.

recruits mainly from the industrial and agricultural labouring classes (VIIa and VIIb).

However, this picture is exclusively in terms of a two-point life-time trajectory, and says nothing about what happens in between. Table 2 lists all class episodes, or 'spells', experienced by respondents during their careers to age 35, and gives us a different perspective. Possibly the strongest feature of the comparison is the 'absorbing' nature of farming: though very few persons enter it as a first class, those who enter it at any stage are highly unlikely ever to leave it. Conversely, it can be seen that the urban petty bourgeoisie is not so retentive, showing quite substantial flows to and from the working classes (V, VI, VIIa and VIIb), and from the routine non-manual class. The service class still appears quite retentive, though with 28 per cent of spells in the service class ending in transition to other classes, not as retentive as the first–last table suggests. The working classes, too, show increased mobility, though interestingly the increase is mostly in short-range moves.

There are, as noted, two problems with the first–last table. As well as being blind to the possibility of multi-stage careers, it is very sensitive to the distribution of entry class—that is, it is distorted by the fact that certain classes are disproportionately unlikely to be entered as first classes, with the result that their patterns of retentiveness and association with other classes are not well reflected in the table. Conversely, there are also problems with the table of episodes. It fails to distinguish between long and short spells, giving twenty years in a class the same weight as a month, and it loses sight of the sequential nature of mobility, the importance of

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3 Censored spells (i.e. those still going at age 35 and thereby having no observed destination) are presented on the diagonal.
the trajectory of the whole career. However, since their failings are to some extent complementary, to consider the two tables together adds to our understanding.

To see evidence of historical change, we now look at changes in class distributions across cohorts. Table 3 below summarises the last-class distribution over the six cohorts. There is very little unbroken trending. We see uneven growth in the three white-collar classes, and in the higher manual classes (V and VI), also to some degree in the urban petty bourgeoisie, while there is decline in agricultural labour. Table 4 shows how class of entry changes across cohort. Very small numbers of jobs begin

Table 3. Class at 35 by cohort.

<table>
<thead>
<tr>
<th>Cohort born</th>
<th>I-II</th>
<th>III</th>
<th>IVab</th>
<th>IVcd</th>
<th>V-VI</th>
<th>VIIa</th>
<th>VIIb</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>before Sept 1913</td>
<td>9</td>
<td>9</td>
<td>8</td>
<td>31</td>
<td>34</td>
<td>55</td>
<td>66</td>
<td>213</td>
</tr>
<tr>
<td>Oct 1913–Sept 1918</td>
<td>22</td>
<td>15</td>
<td>13</td>
<td>48</td>
<td>30</td>
<td>57</td>
<td>51</td>
<td>236</td>
</tr>
<tr>
<td>Oct 1918–Sept 1923</td>
<td>14</td>
<td>15</td>
<td>20</td>
<td>36</td>
<td>30</td>
<td>70</td>
<td>39</td>
<td>224</td>
</tr>
<tr>
<td>Oct 1923–Sept 1928</td>
<td>26</td>
<td>22</td>
<td>16</td>
<td>37</td>
<td>41</td>
<td>60</td>
<td>41</td>
<td>243</td>
</tr>
<tr>
<td>Oct 1928–Sept 1933</td>
<td>23</td>
<td>18</td>
<td>23</td>
<td>47</td>
<td>35</td>
<td>58</td>
<td>20</td>
<td>224</td>
</tr>
<tr>
<td>Oct 1933–Sept 1938</td>
<td>40</td>
<td>20</td>
<td>19</td>
<td>28</td>
<td>52</td>
<td>45</td>
<td>23</td>
<td>227</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>134</strong></td>
<td><strong>99</strong></td>
<td><strong>99</strong></td>
<td><strong>227</strong></td>
<td><strong>222</strong></td>
<td><strong>346</strong></td>
<td><strong>240</strong></td>
<td><strong>1366</strong></td>
</tr>
</tbody>
</table>

Table 4. Entry class by cohort.

<table>
<thead>
<tr>
<th>Cohort born</th>
<th>I-II</th>
<th>III</th>
<th>IVab</th>
<th>IVcd</th>
<th>V-VI</th>
<th>VIIa</th>
<th>VIIb</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>before Sept 1913</td>
<td>5</td>
<td>10</td>
<td>0</td>
<td>5</td>
<td>30</td>
<td>42</td>
<td>121</td>
<td>213</td>
</tr>
<tr>
<td>Oct 1913–Sept 1918</td>
<td>16</td>
<td>23</td>
<td>2</td>
<td>4</td>
<td>26</td>
<td>35</td>
<td>130</td>
<td>236</td>
</tr>
<tr>
<td>Oct 1918–Sept 1923</td>
<td>6</td>
<td>16</td>
<td>2</td>
<td>1</td>
<td>32</td>
<td>49</td>
<td>118</td>
<td>224</td>
</tr>
<tr>
<td>Oct 1923–Sept 1928</td>
<td>14</td>
<td>26</td>
<td>1</td>
<td>2</td>
<td>32</td>
<td>59</td>
<td>109</td>
<td>243</td>
</tr>
<tr>
<td>Oct 1928–Sept 1933</td>
<td>13</td>
<td>33</td>
<td>1</td>
<td>5</td>
<td>29</td>
<td>64</td>
<td>79</td>
<td>224</td>
</tr>
<tr>
<td>Oct 1933–Sept 1938</td>
<td>16</td>
<td>39</td>
<td>3</td>
<td>2</td>
<td>43</td>
<td>45</td>
<td>79</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>70</strong></td>
<td><strong>147</strong></td>
<td><strong>9</strong></td>
<td><strong>19</strong></td>
<td><strong>192</strong></td>
<td><strong>294</strong></td>
<td><strong>635</strong></td>
<td><strong>1366</strong></td>
</tr>
</tbody>
</table>

Interestingly, there is no real evidence in these figures of a decline in farming. This is partly due to the facts that most of the decline in agricultural employment was among agricultural labourers, and that some farmers subsidise their farming by a second job, or are subsidised by the state; but it might also reflect a lowering of the age of inheritance—perhaps a greater proportion of those who are going to inherit have done so by age 35 in the later cohorts than in the earlier, and this masks a decline in the number of people who ever become farmers.
in Class I and II, though there is some evidence of an upwards trend. Entry to the labour market through Classes III, and to a lesser extent, V–VI and VIIa increases across the cohorts, though not monotonically.

Two simple measures of mobility during the work life are recorded in Tables 5 and 6: the distribution of episodes across cohorts by the class in which they occurred, and the average number of episodes experienced, shown in relation to class at 35 and cohort. While the absolute numbers of spells show some trends—increases in the service class, the routine non-manual class and the skilled working class, declines in agricultural labour—they do not diverge greatly from the trends in class size. On the other hand, the average number of spells experienced by members of each class at 35 shows few trends, with the exception of an increase for the service class.

From Tables 3 to 6, we can thus see trends in class distributions—notably the growth in the white collar classes and the supervisory and skilled working classes—and also the general pattern of mobility between classes. We can also see how this mobility differs, depending on whether we view

### Table 5. Class spells by class of spell and cohort.

<table>
<thead>
<tr>
<th>Cohort born</th>
<th>I–II</th>
<th>III</th>
<th>IVab</th>
<th>IVcd</th>
<th>V–VI</th>
<th>VIIa</th>
<th>VIIb</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>before Sept 1913</td>
<td>9</td>
<td>21</td>
<td>16</td>
<td>32</td>
<td>65</td>
<td>131</td>
<td>161</td>
<td>435</td>
</tr>
<tr>
<td>Oct 1913–Sept 1918</td>
<td>25</td>
<td>44</td>
<td>31</td>
<td>52</td>
<td>66</td>
<td>143</td>
<td>182</td>
<td>543</td>
</tr>
<tr>
<td>Oct 1918–Sept 1923</td>
<td>19</td>
<td>37</td>
<td>27</td>
<td>38</td>
<td>83</td>
<td>142</td>
<td>145</td>
<td>490</td>
</tr>
<tr>
<td>Oct 1923–Sept 1928</td>
<td>34</td>
<td>59</td>
<td>26</td>
<td>38</td>
<td>93</td>
<td>170</td>
<td>148</td>
<td>568</td>
</tr>
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<td>65</td>
<td>28</td>
<td>49</td>
<td>77</td>
<td>159</td>
<td>112</td>
<td>530</td>
</tr>
<tr>
<td>Oct 1933–Sept 1938</td>
<td>48</td>
<td>67</td>
<td>26</td>
<td>30</td>
<td>109</td>
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<td>101</td>
<td>512</td>
</tr>
<tr>
<td>Total</td>
<td>175</td>
<td>293</td>
<td>154</td>
<td>239</td>
<td>493</td>
<td>875</td>
<td>849</td>
<td>3078</td>
</tr>
</tbody>
</table>

### Table 6. Average number of spells ever experienced by class at 35 and cohort.

<table>
<thead>
<tr>
<th>Cohort born</th>
<th>I–II</th>
<th>III</th>
<th>IVab</th>
<th>IVcd</th>
<th>V–VI</th>
<th>VIIa</th>
<th>VIIb</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>before Sept 1913</td>
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<td>1.9</td>
<td>2.8</td>
<td>2.8</td>
<td>2.0</td>
<td>2.4</td>
<td>1.5</td>
<td>2.1</td>
</tr>
<tr>
<td>Oct 1913–Sept 1918</td>
<td>1.6</td>
<td>2.5</td>
<td>3.8</td>
<td>2.4</td>
<td>2.5</td>
<td>2.9</td>
<td>1.8</td>
<td>2.4</td>
</tr>
<tr>
<td>Oct 1918–Sept 1923</td>
<td>2.8</td>
<td>2.6</td>
<td>2.6</td>
<td>2.6</td>
<td>1.8</td>
<td>2.6</td>
<td>1.6</td>
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<td>2.0</td>
<td>1.1</td>
<td>2.8</td>
<td>2.6</td>
<td>2.5</td>
<td>1.6</td>
<td>2.4</td>
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<tr>
<td>Oct 1928–Sept 1933</td>
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<td>2.4</td>
<td>2.8</td>
<td>2.8</td>
<td>2.7</td>
<td>2.2</td>
<td>1.9</td>
<td>2.4</td>
</tr>
<tr>
<td>Oct 1933–Sept 1938</td>
<td>2.1</td>
<td>2.2</td>
<td>2.7</td>
<td>2.4</td>
<td>2.5</td>
<td>2.6</td>
<td>1.5</td>
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<td>2.4</td>
<td>2.5</td>
<td>1.6</td>
<td>2.3</td>
</tr>
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</table>
it from the perspective of the first–last trajectory, or from that of the cumulated moves made during work life. But it is difficult to deal with more complex relationships than these, other than in an intuitive rather than an analytical way. We cannot tell, for instance, if the pattern of association between classes changes across time, nor properly understand how the pattern of class spells relates to life-time trajectories, nor how that relationship changes across time. For this, formal modelling has to be resorted to, which is introduced in the next section.

Modelling Trends in Life-Time Mobility in Ireland

The analytical exercise that follows is essentially simple in nature. In brief, I have created two tables from the data: (i) the ‘first–last table’, representing the relationship between class of entry and mature class position, for each of three pairs of the initial six birth cohorts; and (ii) the ‘cumulated spells table’, classifying, again by cohort, every class spell experienced by each respondent by the class in which it took place and the outcome of the spell—that is, the class to which the respondent moved at the end of that spell, or remained in until the cut-off point at age 35.\(^5\) I then apply a series of loglinear models to these tables in order, first, to identify patterns of association between classes independently of the absolute distributions; and then to identify change in these patterns of association, if any can be found.

With both tables the same technique is used to search for historical change: the sample is divided into cohorts, discarding any cohorts whose youngest member had not achieved the age of 35 at interview, and discarding any information about individuals' histories after age 35. This gives comparable information on cohort members' complete careers up to age 35 and, at the expense of throwing away data, avoids problems of cohorts having different ranges of experience.

Because of sparsity in the data, models are presented using a three cohort scheme, rather than the six cohorts represented in Figure 1. This

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\(^5\) The analysis of tables of counts of class spells or of transitions between classes has been used in several contexts over the past few years. It has notably been advocated for the study of social mobility by Featherman and Selbee (1988). However, my approach differs from theirs, and I would argue that it is an improvement in terms of interpretability. The critical difference is that I tabulate all spells, which includes spells not finished at the time of observation, whereas they tabulate only transitions, thereby excluding such censored spells, together with the awkward inclusion in cells on the main diagonal of the spells of those respondents who were still in their first episode at the time of observation and therefore had had no transition. This makes their table difficult to interpret, and the inclusion of all spells, censored or otherwise, avoids this problem.
reduces the historical resolution but means that any trends found are relatively long term and robust. The cohorts are (i) those born before September 1918, (ii) those born thereafter and before September 1928, and (iii) those born after that and before September 1938. A three-cohort set-up is easy to handle, and the larger numbers in the cells of the table mean that the modelling is more efficient, but there are problems: three cohorts allow only two consecutive contrasts, and the cohorts contain persons up to ten years apart in age, and thus cover a wide range of historical experience. It will therefore be hard to pick up detailed historical change, but any changes which emerge will be of a more enduring kind.

Given that the two sets of data are organised in tables of similar structure, the same set of models can be applied to them to search for trends. In order to test for change in the patterns of association between classes, I use the following approach. First, I fit a model which takes account of the changing distributions of class origins and destinations across cohorts, and assumes that the pattern of association between classes does not change across cohorts. This can be referred to as the ‘no-trend’ model. Then I fit a similar model with the addition of terms which allow the associations between each possible pair of classes to change in a constant fashion across cohorts. This can be called the ‘constant-trend’ model. In this model, individual elements of the association, the flow from class x to class y, can be declining or increasing, but the change will be proportionately constant across each adjacent pair of cohorts.

In loglinear modelling terms, the no-trend model includes all the two-way interactions in the tables, which is to say it assumes that all the information or pattern in the data is contained in the distributions of origins and destinations, how these change across cohorts, and how origins and destinations relate to each other, irrespective of differences across cohorts. The ‘fit’ of the model is a measure of how well a table generated under these assumptions replicates the observed values. The no-trend model can be written as

\[ \log F_{ijk} = \lambda + \lambda^O + \lambda^D + \lambda^C + \lambda^{OD} + \lambda^{OC} + \lambda^{DC} \]

6 The terms origin and destination are used here for simplicity, and mean respectively the class in which a spell takes place and the new class, a move to which ends the spell. Alternatives such as ‘class of spell’ and ‘transition class’ are too clumsy.
7 In terms of the GLIM program which I use, the model is, Origin*Destination + Origin*Cohort + Destination*Cohort.
8 The fit is expressed as the relationship between the deviance (a measure of the difference between the observed and predicted values) and the degrees of freedom, which are inversely related to the complexity of the model. It is necessary to take both into account because it is generally possible—but not always useful—to reduce the deviance by adding extra elements to the model.
The constant trend model then is

$$
\log F_{ijk} = \lambda + \lambda^O + \lambda^D + \lambda^C + \lambda^{OD} + \lambda^{DC} + \beta^{OD}T
$$

where $F_{ijk}$ is the expected frequency in the ijk-th cell. As can be seen, the constant-trend model is closely related to the no-trend model, differing only in the addition of a term taking account of change across cohorts in the relationship between origin and destination. For each origin-destination pair, it estimates the parameter, $\beta^{OD}$, where $\beta^{OD}T$ measures the changing association across cohorts, and $T$ is a continuous variable having the same values as the cohort variable (i.e. $T = 1$ for cohort 1, etc.). That is, it adds to the no-trend model the assumption that the association between each origin-destination pair will deviate from the base pattern of association by an amount which increases by a fixed proportion from cohort to cohort, in fact one that is linear in the logs (cf. Payne, Payne and Heath, 1991).

Table 7 reports the model search process for both the first-last table and the cumulated spells table. With both tables, we find a big reduction in $G^2$ with the introduction of the constant-trend variable. However, when the change in degrees of freedom is taken into account, the reduction is significant only for the cumulated spells table. Thus, it can be said that there is evidence for change in the patterns of association between classes in terms of the movements of men during the work life, but not in the patterns of association between first class and last class.

The constant-trend model fits the cumulated spells table well, but it may be overly restrictive. Specifically, the assumption that the trending

<table>
<thead>
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<th>Table 7. Model fit statistics.</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td><strong>Cumulated spells</strong></td>
</tr>
<tr>
<td><strong>table</strong></td>
</tr>
<tr>
<td>$G^2$</td>
</tr>
<tr>
<td>No trend</td>
</tr>
<tr>
<td>Constant trend</td>
</tr>
<tr>
<td>- Improvement</td>
</tr>
<tr>
<td>Significance of improvement</td>
</tr>
</tbody>
</table>

9 In GLIM terms, the constant trend model adds Origin*Destination*T to the no-trend model, where T has the same values as Cohort but has not been declared a factor (i.e. a categorical variable).

10 The probability figure given for the improvement achieved by the constant trend model represents the probability of the reduction in $G^2$ occurring by chance (the lower the probability, the more likely the improvement is real).
change in association between classes can be modelled by a proportionately constant increase can be challenged. The pace of the trend might change over time or the trend might be subject to occasional temporary reverses. If this is the case, the assumption of the model that change is proportionately constant will not reflect reality accurately. To deal with this, a third model can be fitted, which, instead of taking a linear set of values for the trend variable (i.e., $T = 1, 2, 3$, etc.), uses an iterative procedure to estimate the best values. This is akin to saying that while the constant-trend model places the cohorts at equally spaced intervals on an underlying continuum of change, the 'estimated-trend' model searches, rather, for the best places to position each cohort. The estimated-trend model is a version of Goodman's log-multiplicative model (Goodman, 1984: 203–222), and is more complicated than that of constant trend. However, it is conceptually close to the latter, in that it searches for the set of values for the $T$ variable which make for the best fit. In other words, the constant-trend model can be viewed as a special case of the estimated-trend model, where the trend variable is constrained to 1, 2, 3, etc.

One problem that arises is how to choose between the constant-trend and the estimated-trend models. Although they are not actually hierarchically related, the solution that will have to be taken up is to treat them as if they were so related, and to take the difference in $G^2$ as distributed as $\chi^2$ with $k-2$ degrees of freedom, where $k$ is the number of levels of the trend variable.

The estimated-trend model was fitted to both tables, and while in the case of the cumulated spells table, it did improve significantly over the no-trend model it did not do so over the constant-trend model. This suggests that, at least on the basis of cohorts, trends are constant in proportional terms. However, this may be due to the small number of contrasts available, so models were also estimated using the initial six cohorts. These did show an improvement in fit achieved by the estimated-trend model for the cumulated spells table. Results are not presented here because the data were relatively sparse and the modelling therefore less reliable, but the indication is that on closer examination the trend in the cumulative spells table may not be a straight line. Most notably, a significant reversal of trend is shown up in the final cohort, which could be speculatively attributed to the fact that the early part of this cohort's work history falls in the depression of the 1950s.

11 Personal communication from Sir David Cox.
Looking at the Change in the Cumulated Spells Table

Given that the modelling tells us that the pattern of association between class positions during worklife is changing, it is then of interest to determine exactly what sorts of changes are actually happening. An obvious approach seems to be to look at the parameters of the constant-trend model; but these are not completely determinate, as they are structured as the interaction between two dummy variables and vary substantially if the null categories are changed. However, given that the constant-trend model fits better than the no-trend model, we can compare the fitted or predicted values under the no-trend model with the actual values. The trends we can see there in the residuals (the differences between the observed and fitted values), to the extent that any are apparent, are precisely what is picked up by the trend model.

The simplest strategy is to choose those origin–destination pairs whose residuals have a consistent pattern: that is, pick out those pairs for which the difference between the observed and the fitted values either rises or falls consistently over the three cohorts, and to exclude those whose residuals have a V-shaped (or inverted V-shaped) course.12 The pattern of trends thus established is presented in Table 8.

12 This is simple in the 3-cohort case, but becomes more complicated if a cohort variable with more values is used. Even in this case, though, we could discount cases where intermediate figures are very close to either the first or the last, though outside their range and therefore do not present a monotonic progression; and we could take account of the size of trends, and ignore particularly small movements. In fact, neither adjustment makes a large difference to the picture reported in the text.

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<table>
<thead>
<tr>
<th>Class of spell</th>
<th>I–II</th>
<th>III</th>
<th>IVab</th>
<th>IVcd</th>
<th>V–VI</th>
<th>VIIa</th>
<th>VIIb</th>
</tr>
</thead>
<tbody>
<tr>
<td>I–II</td>
<td>-b</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>+</td>
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<td>IVab</td>
<td></td>
<td></td>
<td>+</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IVcd</td>
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<td></td>
<td>+</td>
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<tr>
<td>V–VI</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td>+</td>
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<tr>
<td>VIIa</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>VIIb</td>
<td></td>
<td></td>
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<td></td>
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</tr>
</tbody>
</table>

a Censored spells are treated as transitions to the same class.
b - implies a decreasing trend, + an increasing trend, and a blank means no clear trend.
Sixteen of the forty-nine class pairs in the table show a systematic pattern in the residuals under the no-trend model. A reading of ‘increase’ means that the difference between the observed and the fitted values gets greater over the three cohorts—the model over-predicts the earlier, and under-predicts the later values. That is, an increase presumes

\[ R_1 < R_2 < R_3, \text{ where } R = \text{Observed} - \text{Fitted} \]

Thus, an increase means that flows from the origin to the destination class are growing across cohorts, allowing for changes in the sizes of these classes. An alternative way of saying this is that the ‘propensity for mobility’ from the origin to the destination class has increased.

Looking for patterns in residuals is often useful, but the fit of models based on such examination is statistically suspect—the data suggest the model which is then tested against the same data. However, in this case, since it is first found that the relationship exists, and only then are the residuals that go (in part) to make it up examined, I can claim to be innocent of data-dredging. What it is legitimate to do here is to fit a model based purely on the residuals, just to see how much of the improvement of the constant trend model relative to the no-trend model is represented by the sixteen specific trends noted. To do this I created a categorical variable set equal to 1 for any row-column combination which does not show a trend, to 2 for any combination trending upwards and to 3 for any combination trending downwards. I then fitted the no-trend model with the addition of this new factor, interacting with the cohort variable. This improves the fit substantially, and if the new model is compared with the constant-trend model, the latter is not found to be clearly better—showing that a significant amount of the explanatory power of the constant-trend model resides in the sixteen trends identified.

Interpreting the Trends

When we look at Table 8 we see some interesting patterns. Notable is the fall in the retentiveness of the white collar classes (that is, the service

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13 Of these, twelve are robust to the extent of also appearing in the model in which censored spells are treated separately, rather than as transitions to the same class as here. Treating them as transitions to the same class involves regarding a class’s retentiveness as closely related to its attractive power, which is why it is favoured here.

14 The retentiveness of a class, or its ability to hold on to its members, shows up in this data only as censoring. A censored spell is one which was still going on at the cut-off point of age 35, and thus one which does not have a destination, since no transition is recorded. To deal with counts of spells we lose information on their length, and can only distinguish retentiveness as the absence of a transition. In the modelling these are treated as transitions to the same class, and are presented on the diagonal.
classes, I and II, and the routine non-manual class, III). The service class, especially, used to consist of extremely secure positions, but this is less the case in the later cohorts. Associated with this lower—though still relatively high—retentiveness of the service class are increased propensities for mobility from the service class to all other classes except the two agricultural classes; while in contrast there are increased propensities for mobility from the routine non-manual class to the agricultural classes. The only change in the picture from the point of view of recruitment is the increased inflow to the service class from the semi- and unskilled working class.

In the case of the petty bourgeoisie we see greater retentiveness, and increased inflows from the service class. There is also a significant drop in the propensity for mobility to agricultural labour.

The two agricultural classes show no patterns in items of exits, but share in new patterns of recruitment, with increased flows from the routine non-manual class, and the skilled and supervisory working class, and declines in flows from the non-skilled working class.

Finally, when we look at the working classes, we see an increased propensity for mobility from the non-skilled class to the service class (and, if we slightly loosen our definition of trend, also to the routine non-manual class). Flows from the skilled class to both the agricultural classes increase, while those from the less skilled decline. There is also an increase in flow from the non-skilled to the skilled working class.

Can the Trends be Interpreted Historically?

Is it justifiable to treat the three cohorts as proxies for distinct phases of history? The first of the three cohorts can be characterised as pre-war/war, the second as war/post-war/1950s, and the third as 1950s-slump/1960s-recovery. Because these are very broad cohorts, our ability to relate change in behaviour to specific historical events is compromised. But their historical experiences are still sufficiently distinct for us to expect significant differences in mobility between them. The first cohort will have worked through what was a generally austere and isolationist period, the second through more varied times of both growth and recession, and the third has had an experience the others have not, of relatively sustained growth, though also enduring initially a very significant period of depression and emigration. (It would be extremely interesting to have data on

15 By allowing the middle value to be outside the range of that of the first and last cohorts, but within ten per cent of one of them.
one more cohort, to test the hunch that where men enter the labour market in a time of growth, rather more distinct changes in patterns of mobility will result).

Apart from this periodisation, certain underlying trends have been more or less steadily at work, and in respect of these the cohorts can be regarded as being positioned on a continuum. The main trend is the decline in employment in agriculture, which Census figures show to be steady throughout most of the century and to accelerate after 1946. The second trend, but one that is not as steady or as long-term as the agricultural decline, is the growth in white-collar classes and in the skilled and supervisory working class. Thus, it is generally valid to treat differences between the cohorts partly as reflecting different (broad) periods in Irish social history, and partly as consecutive stages on various continua of development.

In sum, we can regard the younger cohort(s) as in general experiencing more economic growth, more exposure to foreign influences (cultural as well as economic), a higher level of industrialisation with concomitant growth in manufacturing and white-collar occupations and a decline in agricultural occupations, somewhat greater urbanisation, and a higher level of education (although the data miss the effect of the 1967 expansion in free education, there is some evidence of growth before). What we can then say on the basis of the present analysis is that, concurrent with these trends and changes, we have evidence of changes in the patterns of association between classes during the work life.

What Does it Mean?

The cumulated spells table shows many changes but it picks up a few centrally important processes. Two in particular are worth considering more closely. First is the growth in white-collar occupations and the penetration of their influence throughout much of the society. Second is the broadening range of experience of those entering the agricultural classes.

Perhaps the most striking set of effects here is the broadening of the associations of the white-collar classes, with their drop in retentiveness and increased outflows to a range of other classes. Indeed, between them they show increased mobility propensities to all other classes. This suggests that the nature of the service class and of the routine non-manual class is changing. Examination of the raw data shows that while the service class used to be very small, very exclusive and very secure, as it grows it becomes increasingly less selective, and less retentive. This may be because
the ‘old’ service class and the ‘new’ service class comprise very different distributions of occupations—formerly, mainly the professions, small in number and well established; latterly, many more bureaucratic positions where contingency or the career structure exposes more people to the probability of changing class. In the earlier periods, members of the service class would largely have been doctors, lawyers, teachers and so on; they would have enjoyed great security, and had little desire or opportunity to change occupations. But the growth of the class was mainly due to growth in other types of occupation, notably in management and administration in industry, commerce and government. While still relatively secure, these occupations expose their incumbents to a slightly greater hazard or opportunity of changing to an occupation in a different class, especially, we can speculate, on a temporary basis. Thus, for instance, a junior manager (Class II) may switch to a supervisory post on the factory floor (Class V) in the expectation that the experience might fit him for a more senior managerial position (Class I).

The patterns of entry into the two agricultural classes also show interesting trends. Both classes show the same increase in inflows from routine non-manual work and from skilled working class positions, and decreased inflows from the non-skilled working class. Given that the overwhelming majority of men entering farming are farmers’ sons, and that many agricultural labourers are also farmers’ sons waiting to inherit (increasingly so in later cohorts, with the mechanisation of farming), we can interpret this changed inflow pattern as evidence of new kinds of activity on the part of farmers’ sons before they come into their inheritance. It is interesting that the pattern leans towards greater involvement in both the routine non-manual class and the skilled rather than the non-skilled working class. This suggests that farm children, who tend to have slightly more than average education, may have a certain advantage in acquiring positions which require some form of certification. And the fact that farmers’ sons spend time in the routine non-manual class suggests that they are being exposed to the probability of much wider mobility, given the nature of routine non-manual work as a kind of class crossroads. Such an educational advantage on the part of farmers’ sons could be seen as evidence of the process identified by Breen et al. (1990), of a move from a society based on property to one based on educational qualifications, but in which the classes with property-based advantages in the past manage to retain their advantage under the new conditions by adopting new strategies. We also see evidence of the other proprietorial class, the petty bourgeoisie, improving its situation, with greater retentiveness and a closer relationship with the service class. Counter-evidence for this advantage-retention thesis exists insofar as the non-skilled working class
also enjoy increased flows to and from the service class, although, if it were possible to make the distinction, I would not expect this favourable access to apply to the particularly low-skilled urban working class, whom Breen et al. identify as being especially disadvantaged in modern Ireland.

To put the foregoing into perspective, it must be repeated that these trends in question are visible only in the cumulated spells table, and not in the overall first–last transition, nor yet in the intergenerational pattern of mobility. Furthermore, they are based on a blunt, three-cohort comparison. But the trends are nonetheless real, and show changes in the way social mobility works that are significant, and that may underlie subsequent change in more general aspects of social mobility. They also show evidence of people adapting to new situations by new strategies and of change at the level of the year-to-year processes of social mobility, even if, as yet, no change in the intragenerational, nor yet intergenerational, outcomes is apparent.

Conclusion

In the short run, while many things change in the course of industrialisation—the actual distribution of class positions, the economy, education and its role in formal recruitment, etc.—the relative desirability and the relative advantages of various class positions do not alter quickly, barring fundamental social upheaval. Thus, long term aims, and the less intentional consequences of established practices, will tend to bring about the same sorts of mobility outcomes as before. When general conditions change the immediate opportunities and short term pressures for mobility will also change—for instance, a farmer's son may take a clerical job in an office while he waits to inherit, whereas before he would not have had the right qualifications and the job would not have existed locally. Nevertheless, we may still expect that, in time, the older power of property will draw him back to the established intergenerational route.

At the same time, in this ephemeral change may lie the promise of more fundamental alteration. To continue with the same example, as farmers' sons get used to the idea of working off the land, even temporarily, the attractions of, and familiarity with, urban life are likely to weaken the power of property. Poorer farms will tend to be abandoned because they cannot compete, whereas, previously, the moral value placed on the land and on the rural lifestyle would have outweighed its relative poverty. That is, when new conditions obtain, the initial push for change will be at the level of immediate opportunities and pressures, but people will attempt to adapt to the conditions in the light of their longer-term
expectations and strategies. Thus, we can have a new pattern of work-life mobility that results in the same first–last outcome, or new patterns of origin-first and first-last mobility that result in the same intergenerational mobility regime. However, there is the possibility that short-term change can begin to change the general topology of class mobility by establishing new routes, if initially only on a short-term basis; it can bring certain classes nearer together and push others farther apart, with the result that, in the long run, the context within which first–last and intergenerational mobility operates is itself reshaped.

I would suggest that such processes are what the present analysis reveals. A different sort of research is needed to examine the mechanics of these processes—to investigate the strategies employed by families to retain advantage when its basis changes and to understand the conditions under which change of this order will bring about change of a more long-term kind. But with the techniques used here it has been shown that while structural change can leave the patterns of intergenerational and first-last mobility apparently unaltered, it is nevertheless possible for patterns of mobility during the work-life to change independently. The analysis shows us that some people took new routes through their work lives as the Republic of Ireland industrialised. But in the period up to 1973, these tended to be different routes to the same sort of place; or, if to different places, were few enough in number not to make a perceptible difference to the final intragenerational outcomes.

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